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Marine Casualty Investigations

Enquêtes sur les accidents maritimes

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FISHING VESSELS

Summaries of Reports of Investigations
into Marine Casualties and Accidents
Aboard Ships

Issue No. 9 Dec. 1989

Summaries of Fishing Vessel Marine Casualties and Accidents

This publication summarizes the Reports of Investigation into marine casualties and/or marine accidents involving fishing vessels which were investigated by the Marine Casualty Investigations Division of Transport Canada and is published three times a year. There is another publication covering commercial vessels and other craft.

Note:

1. A glossary of terms and abbreviations used can be found at the end of this publication.

2. Unless stated otherwise, all times mentioned in this publication are local times.

3. Unless stated otherwise, all Regulations referred to in this publication are made pursuant to the Canada Shipping Act.

4. Unless stated otherwise, all vessels referred to in this publication are Canadian.

The full report of the summaries contained herein may be obtained by writing to:

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Their contents may be deficient and misleading if used in any other process and are not to be used or admitted in evidence in any legal proceedings, either civil or criminal, arising out of any casualty described therein. The statements, opinions and findings in the reports and summaries are those of the Marine Casualty Investigations Division only and do not constitute admissions made by or on behalf of Her Majesty the Queen in right of Canada.

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"VALLEY STREAM"/"OCEAN JOY"

Loss of vessel and operator off Pointe Riche, Nfld.
October 15, 1988.

Summary

After fishing for 9 weeks on the Labrador Coast and while en route to Trout River, Nfld., the 10.05 m wooden Cape Islander "VALLEY STREAM" had to seek shelter at Port au Choix, Nfld. owing to weather conditions. One of the 2 crew members then proceeded home. As the owner/operator was now alone, arrangements were made with an 18.28 m dragger "OCEAN JOY" to tow the "VALLEY STREAM" to Trout River; ETD 0400 October 15, 1988. Sometime between 0200 and 0230, prior to returning on board their vessels, both owner/operators spent several hours at various clubs in the area.

The "VALLEY STREAM", under her own power, followed the "OCEANS JOY" until the harbour limits were cleared. A 55 m length of 3.81 cm polypropylene towline was made fast on the starboard quarter cleat aboard the "OCEAN JOY" and after a single turn round the stemhead of the "VALLEY STREAM" was connected to a ring bolt. The ring bolt was bolted through the deck in a transverse beam on the centre line 1.2 m aft of the stem. The time was 0430. Reportedly, the engine of the "VALLEY STREAM" was run at idle while under tow to fully charge the battery, also, the wheel was secured amidships and no lights were displayed. A large flashlight was on board for use in an emergency.

A close watch was maintained initially at the commencement of the tow and when everything appeared normal, the crew aboard the "OCEAN JOY" turned in leaving one man on watch in the wheel-house. The owner/operator of the "VALLEY STREAM" was last seen at 0500. Two radars aboard the "OCEAN JOY" were in operation, one of which was set on the ½ mile range to monitor the tow. At 0530, when the "VALLEY STREAM" was not seen either on the radar or sighted visually, the towline was checked and when hauled aboard only the ring bolt was found attached.

Despite intense search efforts, only a damaged dory and some pieces of wreckage were found and inspected but neither the operator nor the vessel, were found. The estimated value of "VALLEY STREAM" was $15,000.

Findings

The "VALLEY STREAM" with her owner/operator on board went missing while under tow, in good weather conditions, sometime between 0520 and 0530 on October 15, 1988 in a position off Pointe Riche, Newfoundland. It is presumed the

vessel sank with her owner/operator on board.

In the absence of witnesses to the casualty and in the absence of the vessel and its owner/operator, the precise cause of this casualty cannot be ascertained. From testimony obtained and examination of the limited wreckage, it would appear that most probably:

- the vessel capsized to starboard and immediately sank; and

- the overwhelming was sudden and swift.

The victim who is presumed to have drowned may have lost his life due to the following contributing factors:

- the victim elected to remain on board his vessel during the tow and may have been trapped in the small accommodation space;

- he had not been wearing a lifejacket or any form of PFD;

- he was fatigued at the time;

- he was not an accomplished swimmer; and

- he had consumed an undetermined amount of alcohol in the hours prior to departure.

Other Findings

There was no means of radio communication between the two vessels.

The "VALLEY STREAM" did not show the required lights for a vessel under tow as required by the Regulations.

The "VALLEY STREAM" did not have on board the audio sounding device nor radar reflector.

SECTION OF CABIN LOCATED 19/10/88

PARTIE DU CABINAGE RETROUVÉ LE 19-10-88

DORY LOCATED 19/10/88

DORIS REPÉRÉE LE 19-10-88

APPROXIMATE POSITION TOW LOST	POSITION APPROXIMATIVE OU L'ON A PERDU LA REMORQUE

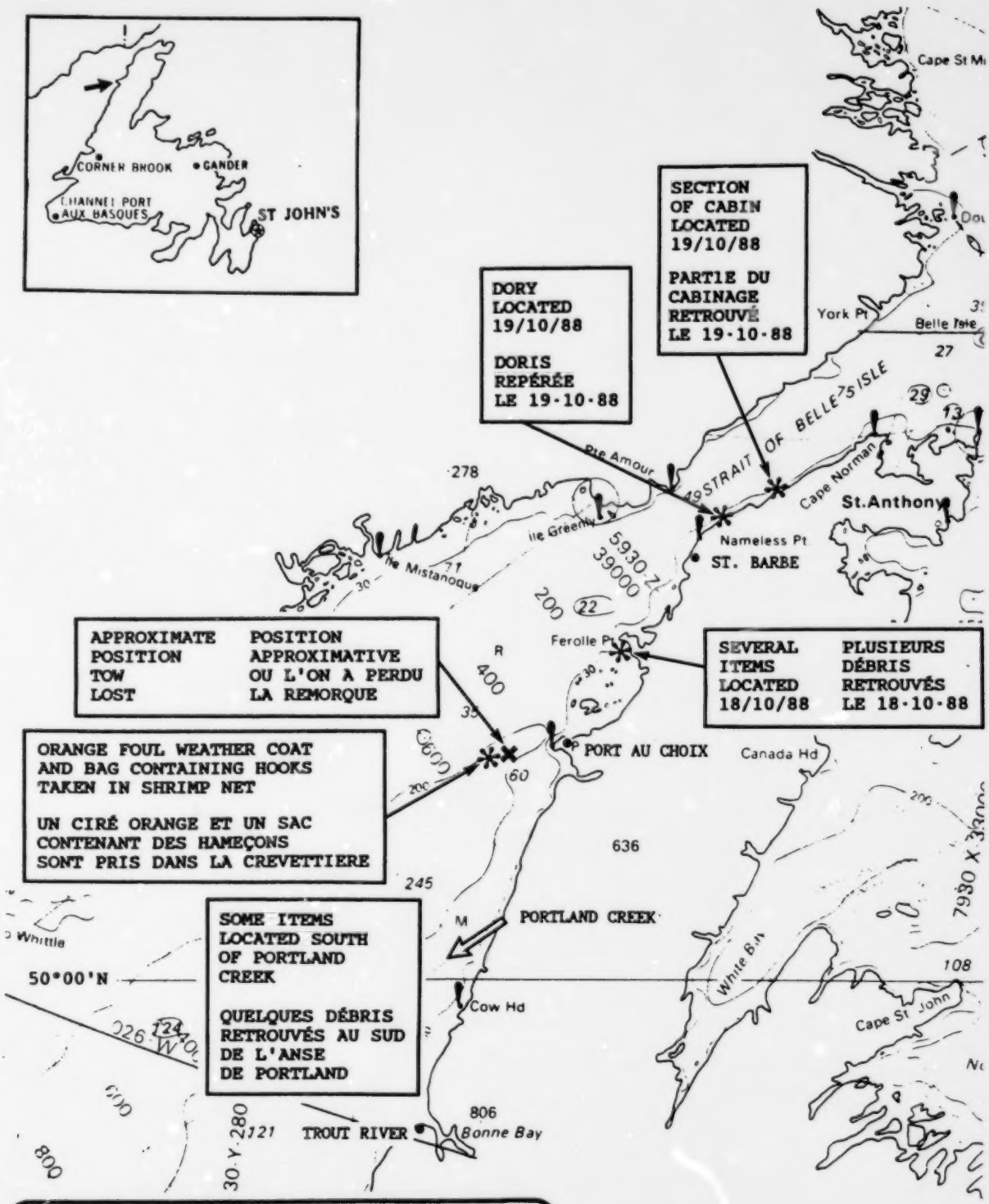
SEVERAL ITEMS LOCATED 18/10/88	PLUSIEURS DÉBRIS RETROUVÉS LE 18-10-88

ORANGE FOUL WEATHER COAT AND BAG CONTAINING HOOKS TAKEN IN SHRIMP NET

UN CIRÉ ORANGE ET UN SAC CONTENANT DES HAMEÇONS SONT PRIS DANS LA CREVETTIERE

SOME ITEMS LOCATED SOUTH OF PORTLAND CREEK

QUELQUES DÉBRIS RETROUVÉS AU SUD DE L'ANSE DE PORTLAND



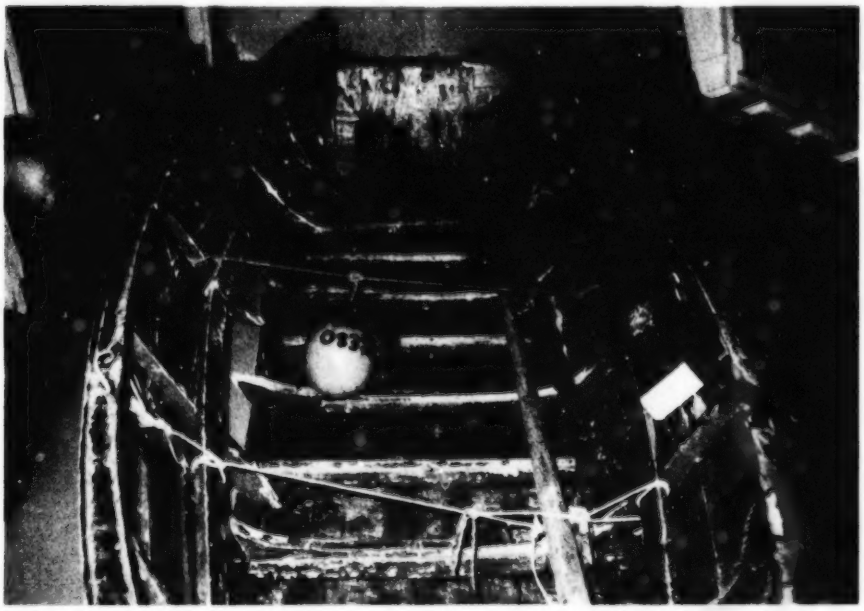
"VALLEY STREAM"

SECTION AGRANDIE DE LA CARTE DU SHC N°4001	ENLARGED SECTION OF CHS CHART No.4001
DEPTHS IN METRES	PROFONDEURS EN METRES

NEWFOUNDLAND

Ring bolt - note the slight bend near the head of the bolt.

Cheville à boucle - remarquez la cheville légèrement gauchie près de la tête.



Note starboard side extensively damaged by force from within.

Remarquez le côté tribord extrémement endommagé par une contrainte de l'intérieur.

"JERICHO"

Loss of vessel and operator, Knight Inlet, B.C., November 23, 1988.

Summary

The 11.75 gross ton "JERICHO" was a double-ended, wooden-hulled Canadian troller of closed construction, with a fish hold located aft of the cabin. She was not subject to inspection by the Ship Safety Branch of the Canadian Coast Guard, but was last inspected for insurance purpose in 1986, and was reportedly well maintained. The vessel, with only the owner/operator on board, departed Steveston, B.C., November 18, 1988, to engage in crab fishery in Knight Inlet, B.C. Neither traps nor ice were loaded in her fish hold. The operator last contacted his wife on November 19 from Sayward, B.C. but had not left a Sailing/Voyage Plan with her.

The "JERICHO", with about 40 traps on her afterdeck, when last sighted by another fishing vessel on November 23 in Knight Inlet, was heading in an easterly direction and yawing in 0.91 m seas; she appeared to lack stability, and her stabilizer poles were not deployed. The weather conditions were E winds at 25-30 knots and reduced visibility in snow showers. According to her previous owner, the "JERICHO", in a lightly loaded condition with beam winds of over 20 knots and with the stabilizer poles in a vertical position, was known, to heel some 5°-10°; thus indicating that the vessel's initial transverse stability was low. There is no evidence to indicate that ballast was added to the vessel in an attempt to improve her transverse stability. The operator was due to return on December 3 but as his wife was accustomed to his late arrivals, she did not inform SAR until December 6 that he had not been in contact. An official SAR response was then initiated. An extensive search of the area, utilizing marine and air resources was conducted over a period of some 2½ days but neither the operator nor his boat was found, and on December 9, the case was handed over to the RCMP as a 'missing person' case.

The insured value of the "JERICHO" was $50,000.

Findings

On the afternoon of November 23, 1988, the Canadian fishing vessel "JERICHO", when last observed proceeding in an easterly direction in Knight Inlet and in poor weather conditions, appeared to lack stability.

In the absence of any eye witnesses and in the absence

of any evidence to the contrary, the precise cause of the disappearance is unknown but of the options it is considered that the "JERICHO" was overwhelmed by the wind and sea conditions and, thus, it would appear that the following factors contributed to this casualty:

- the operator had limited professional fishing experience in the crab fishery and no previous experience fishing in Lull Bay;

- the initial transverse stability of the "JERICHO" was low in that with the stabilizer poles in a vertical position, the lightly loaded vessel was known to heel some 5°-10° when subjected to beam winds in excess of 20 knots;

- high winds from the easterly direction generate heavy tide rips and, when combined with the sea rounding Hoeya Head, makes Lull Bay dangerous to transit;

- the location of the traps on the afterdeck would have adversely affected the vessel's trim, freeboard aft and her transverse stability;

- the practice of not loading traps in the fish hold but only on deck to a great height is dangerous and resulted in a further reduction of the vessel's transverse stability; and

- the dynamic forces exerted by high winds and confused seas would have resulted in the vessel's transverse stability being adversely affected.

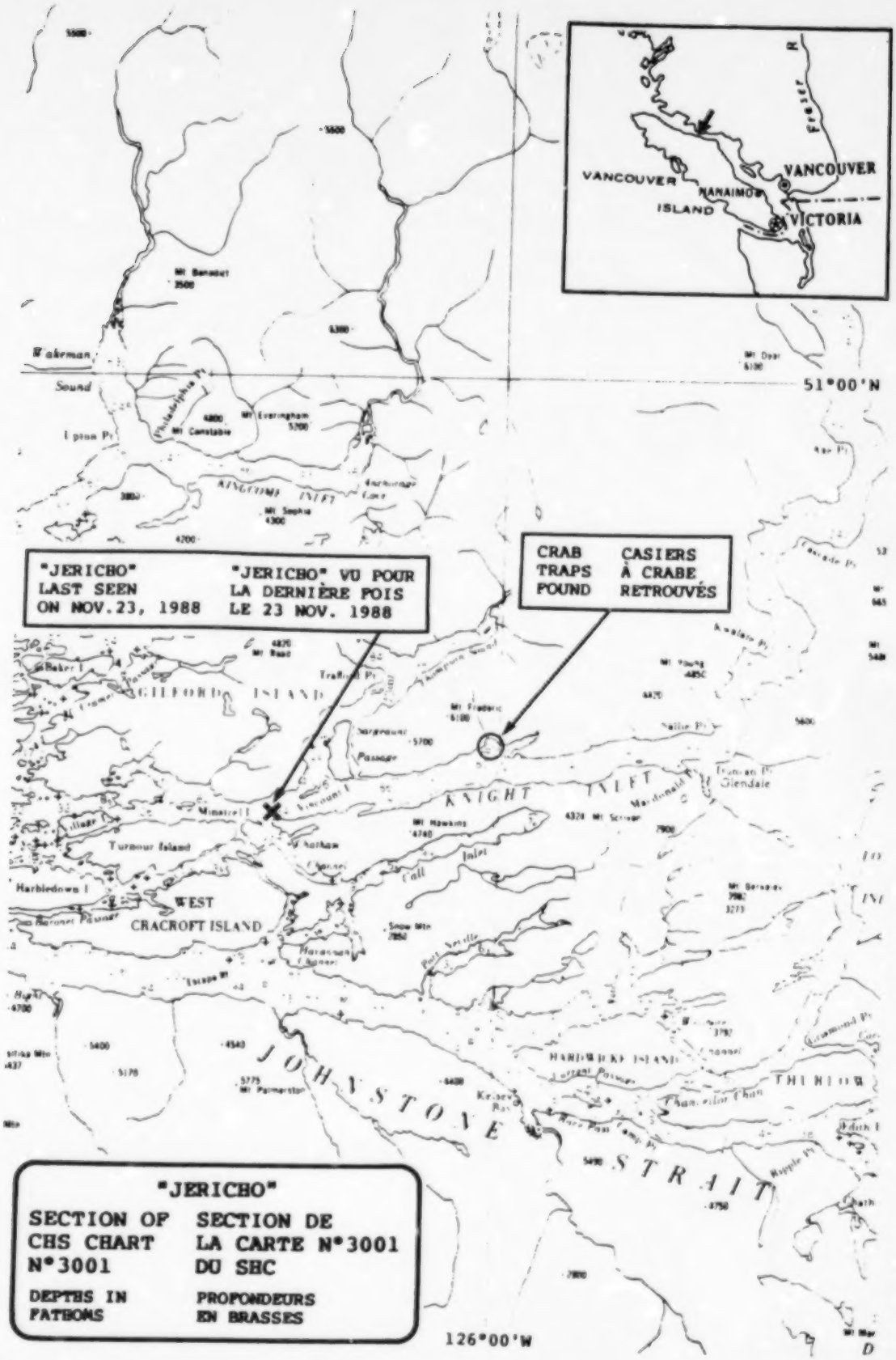
Other Findings

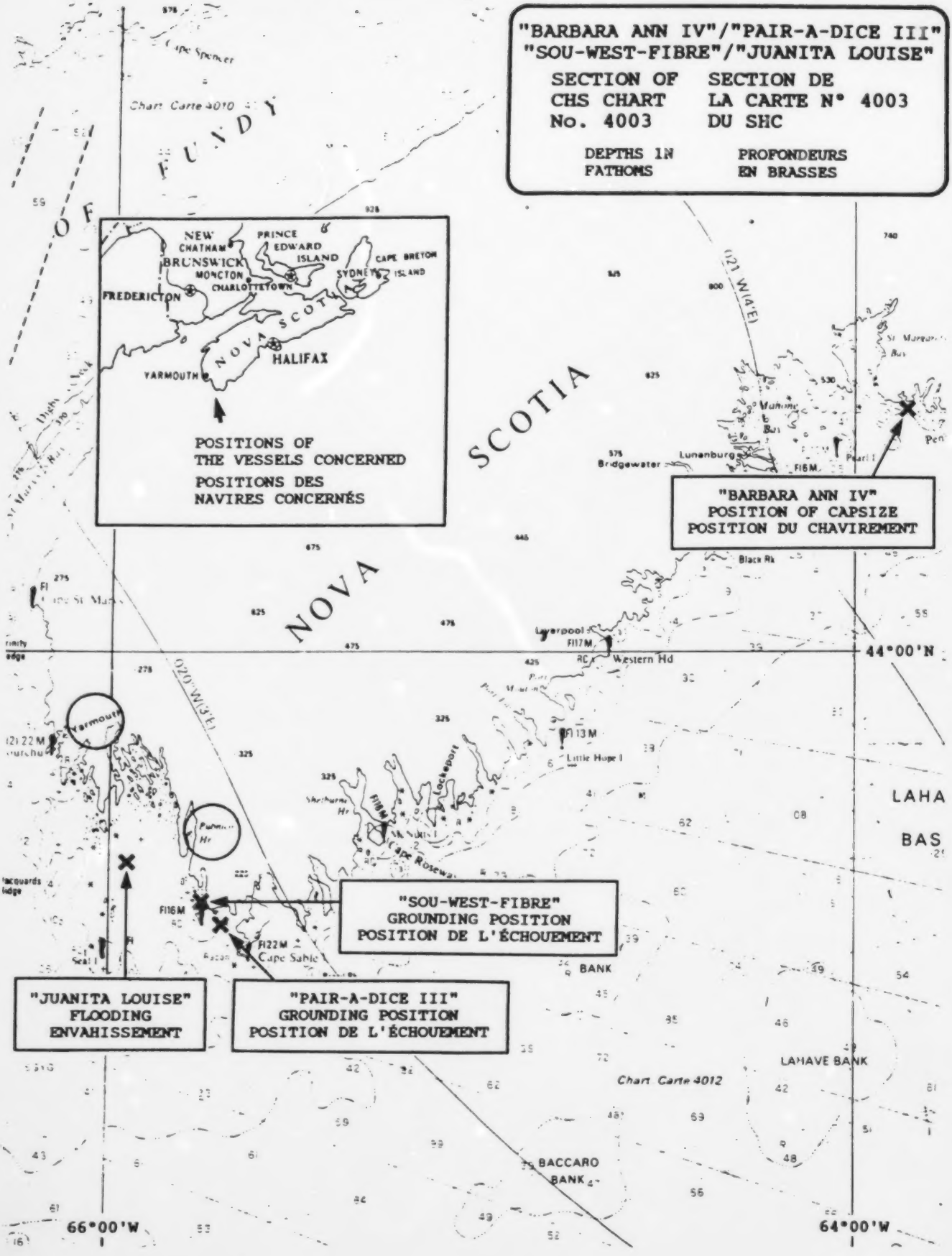
There was no sailing plan or daily telephone contact with the vessel and shore.

The operator fished alone; there was no 'buddy' sailing plan in place.

The cold water temperature limited the operator's survival time to about two hours had he been wearing a lifejacket.

The operator was not in possession of a RORC (Maritime).


VANCOUVER
VANCOUVER
NANAIMO
ISLAND
VICTORIA
Fraser R.
51°00'N
"JERICHO"
LAST SEEN
ON NOV.23, 1988
"JERICHO" VU POUR
LA DERNIÈRE FOIS
LE 23 NOV. 1988
CRAB TRAPS POUND
CASIERS À CRABE RETROUVÉS
GILFORD ISLAND
KNIGHT INLET
Minstrel I.
Turnour Island
WEST
CRACROFT ISLAND
JOHNSTONE STRAIT
HARBLEDOWN ISLAND
"JERICHO"
SECTION OF CHS CHART N°3001
SECTION DE LA CARTE N°3001 DU SHC
DEPTHS IN FATHOMS
PROFONDEURS EN BRASSES
126°00'W


"BARBARA ANN IV"/"PAIR-A-DICE III"
"SOU-WEST-FIBRE"/"JUANITA LOUISE"
SECTION OF CHS CHART No. 4003
SECTION DE LA CARTE N° 4003 DU SHC
DEPTHS IN FATHOMS
PROFONDEURS EN BRASSES
NEW BRUNSWICK
PRINCE EDWARD ISLAND
CAPE BRETON ISLAND
MONCTON
CHARLOTTETOWN
SYDNEY
FREDERICTON
NOVA SCOTIA
HALIFAX
YARMOUTH
POSITIONS OF THE VESSELS CONCERNED
POSITIONS DES NAVIRES CONCERNÉS
"BARBARA ANN IV" POSITION OF CAPSIZE
POSITION DU CHAVIREMENT
"SOU-WEST-FIBRE" GROUNDING POSITION
POSITION DE L'ÉCHOUEMENT
"JUANITA LOUISE" FLOODING ENVAHISSEMENT
"PAIR-A-DICE III" GROUNDING POSITION
POSITION DE L'ÉCHOUEMENT
BAY OF FUNDY
NOVA SCOTIA
Chart Carte 4010
Chart Carte 4012
Lunenburg
Bridgewater
Liverpool
Western Hd
Yarmouth
Lockeport
Cape Sable I
Cape Roseway
LAHAVE BANK
BACCARO BANK
LA BAS
BANK
44°00'N
66°00'W
64°00'W

Lobster Fishery

Casualties involving "SOU-WEST-FIBRE", "PAIR-A DICE III", "JUANITA LOUISE" and "BARBARA ANN IV" on the opening day of the 1988-89 lobster fishing season off the SW Nova Scotian Coast.

Preamble

On the first day of the 1988/89 lobster fishing season for the fishing areas 33 and 34 on the south-west coast of Nova Scotia, four vessels became involved in separate marine casualties. Of the four, one was lost and the others sustained damage. There were no injuries or pollution as a result.

The report also records for comparison purposes the progress and impact safety education has had on the S.W. Nova Scotian coast lobster fleet. Previous seasons had opened in poor weather and the resultant deaths and casualties had drawn considerable public comment about the losses incurred.

1. "SOU-WEST-FIBRE"

Grounding in Pubnico Bay, N.S., November 28, 1988.

Summary

The 36 gross ton fishing vessel "SOU-WEST-FIBRE", with a crew of 4 and loaded with lobster traps, departed Woods Harbour, N.S. at 0700 November 28, 1988 bound for the lobster fishing grounds offshore. The wheel-house was manned by the skipper who was navigating and steering the vessel and a deck-hand maintaining a visual look-out. The winds were SW at 30 knots with rough seas, overcast skies and some 90 m reduced visibility in heavy rain.

The initial route through the inner harbour took the vessel on southerly courses with the intention of turning to starboard and then passing between two islands, Ball Island to the north-west and the Outer Island to the south-east. The passage between the islands is marked by a red lighted, starboard-hand buoy "D2", and a green unlit port-hand buoy "D1". It was the intention to shape a westerly course to the grounds after navigating the passage.

A few minutes prior to grounding, the Loran C in use stopped functioning due to what was believed to be heavy rain; therefore, from that time, navigation relied upon visual sightings and radar. The combination of radar

interference due to sea and rain clutter, together with the radar targets of some 20 other boats in the immediate area lead to confusion and made positive identification of the two buoys difficult.

Due to the heavy rain, the buoys had not been visually sighted; however, the vessel's course was altered to starboard i.e. south-west in the belief that the buoys had been passed. Some moments later, the vessel grounded on the southern tip of a shoal off the Northwest Island, approximately 200 m to the north-west of the buoyed channel; her speed was about 7.5 knots.

The vessel's hull was breached and she sustained damage to her keel, rudder post, rudder and propeller. The vessel was subsequently refloated with assistance from a Canadian Coast Guard lifeboat and towed to Woods Harbour. The estimated cost of repairs was $6,000.

Findings

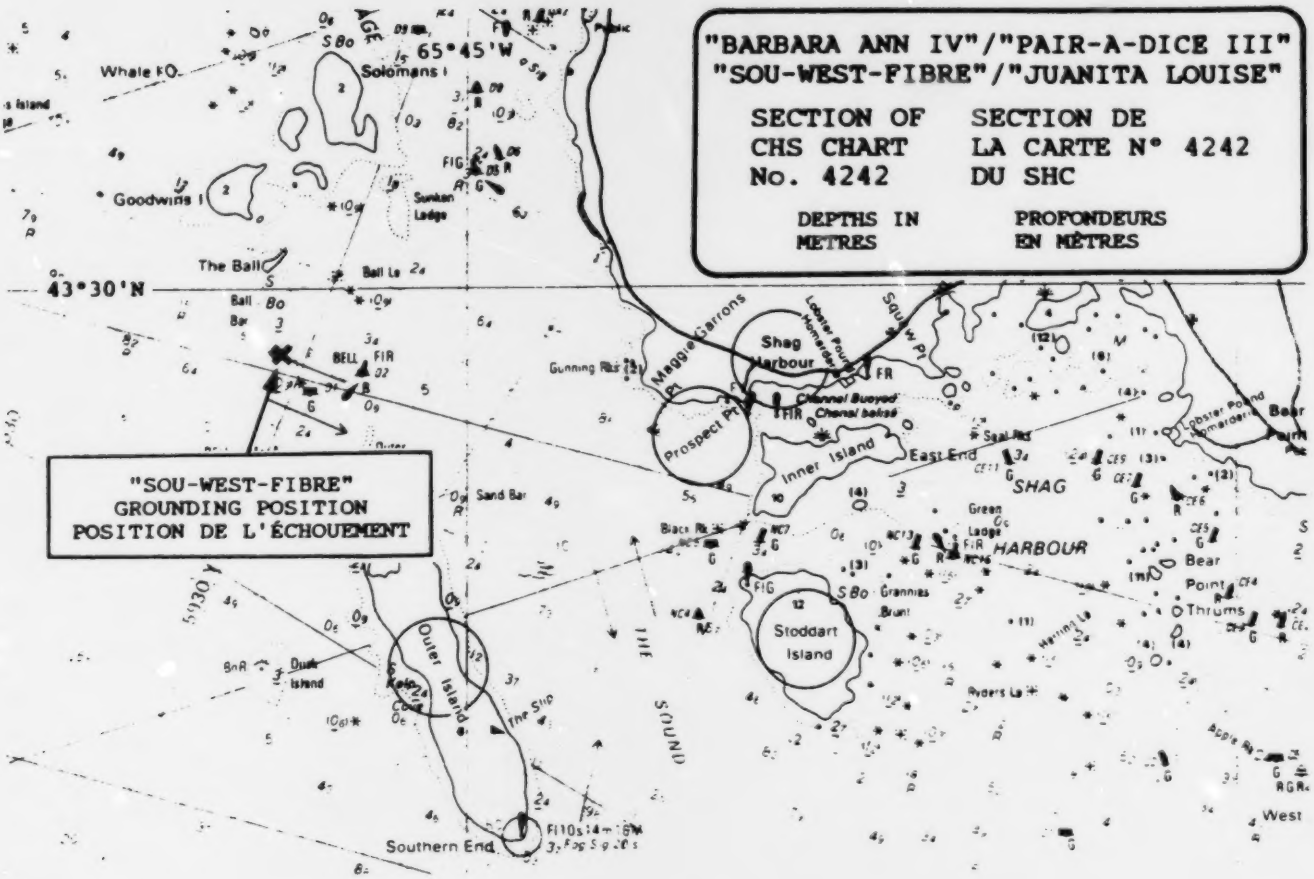
The "SOU-WEST-FIBRE" grounded on a rock shoal during daylight hours but in reduced visibility due to rain, as a result of a navigational error while en route to the fishing grounds.

It would appear that the following factors contributed to the grounding:

- the vessel relied solely on local knowledge for navigation and the CHS chart on board was not used to advantage;

- the combination of radar interference together with radar targets of some 20 boats in the immediate area lead to confusion and made positive identification of the buoys difficult; and

- when uncertainty arose as to the vessel's position, given that the buoys had not been visually sighted, speed was neither reduced nor the vessel stopped to allow time to assess the situation.



"SOU-WEST-FIBRE" after repairs (aground) and awaiting flood tide
"SOU-WEST-FIBRE" après les réparations (échoué) attendant la marée montante

2. "PAIR-A-DICE III"

Grounding off Shag Harbour, N.S., November 28, 1988.

Summary

The 45 gross ton fishing vessel "PAIR-A-DICE III", with a crew of 4 and loaded with lobster traps, departed Shag Harbour, N.S., at 0300, November 28, 1988 bound for a deeper water berth for the opening of the lobster fishing season. The wheel-house was manned by the skipper who was navigating and steering the vessel and a deck-hand who was maintaining a visual look-out. The seas were moderate, winds SW at 10-15 knots, skies overcast and at times 80 m visibility in heavy rain.

After leaving the berth, a southerly course was made until abeam of a passage between the Inner Island and Stoddart Island. The entrance to the passage is marked at its inner end by a red lighted starboard-hand buoy "NC16" to the south and a green unlit port-hand buoy "NC13" to the north. Having sighted the red buoy light, course was altered to starboard, however, in the darkness and rain the unlit green buoy could not be seen, neither was it detected by radar.

The safe distance to pass north of the "NC 16" buoy was misjudged and the vessel grounded on a shoal; her speed was some 6.5 knots. The vessel sustained damage to her forefoot breaching the hull and subsequently additional damage to the propeller and rudder. The ingress of water was contained and the vessel was subsequently refloated with the assistance of a Canadian Coast Guard lifeboat and towed back to her berth. Repairs were estimated to cost $12,000.

Findings

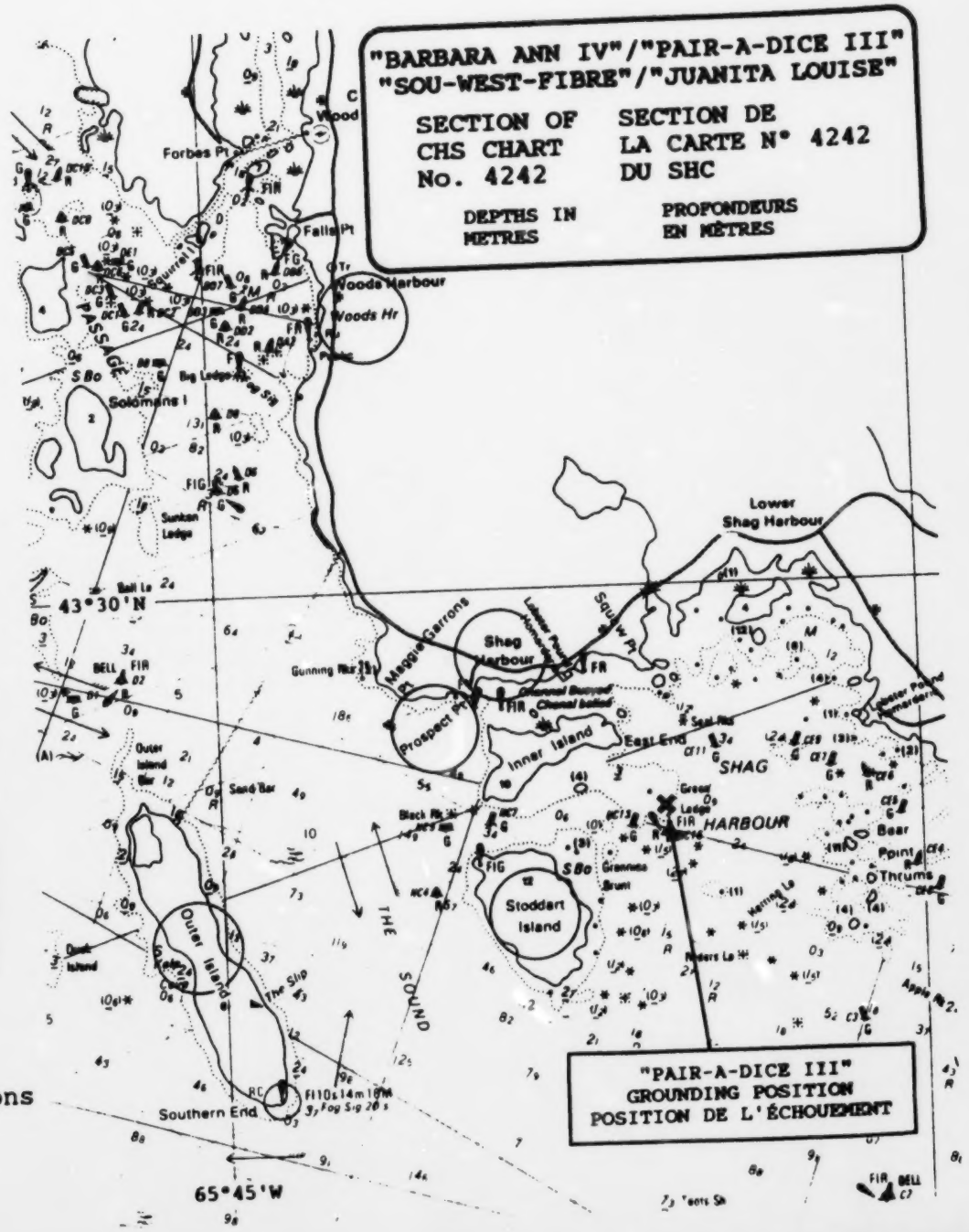
The "PAIR-A-DICE III" grounded on a rock shoal within the harbour area as a result of a navigational error during hours of darkness and while in reduced visibility due to rain. It would appear that the following factors contributed to the grounding:

- the vessel relied solely on local knowledge for navigation and the CHS chart on board was not used to advantage;

- the vessel's electronic navigating equipment was not fully utilized; and

- upon visually sighting the lighted buoy "NC 16", course was altered but the distance at which the vessel would pass north of the buoy was misjudged.

"PAIR-A-DICE III" undergoing repairs
at a boatyard
"PAIR-A-DICE III" subissant des réparations
dans un chantier maritime



3. "JUANITA LOUISE"

Flooding in Lobster Bay, N.S., November 28, 1988.

Summary

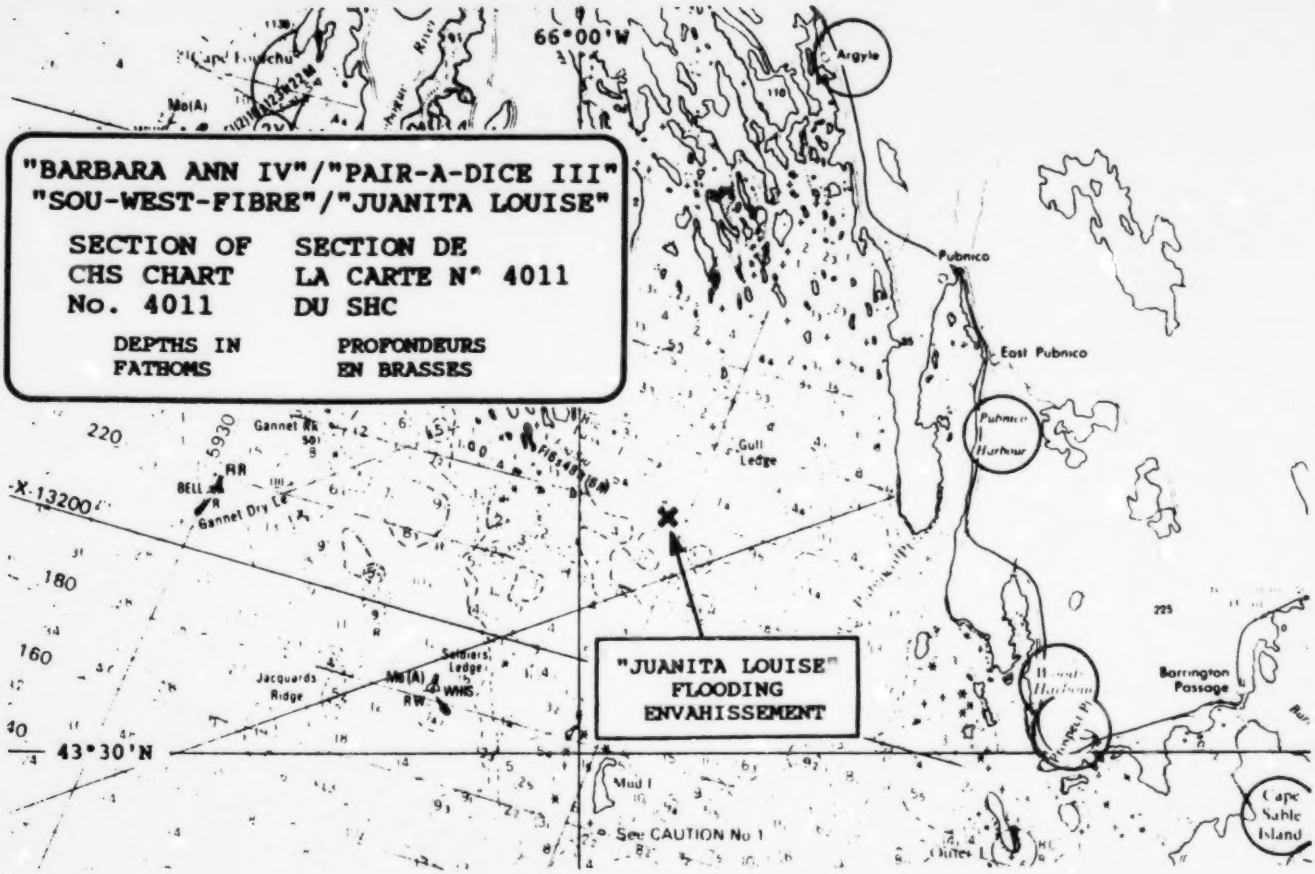
The 19.98 gross ton fishing vessel "JUANITA LOUISE", with a crew of 3 and loaded with lobster traps on deck, departed Argyle, N.S. at 1600, November 28, 1988. The wheel-house was manned by the skipper navigating the vessel and a deck-hand maintaining a visual look-out. Winds were SW at 30-35 knots, seas upto 2 m, the sky overcast with heavy rain.

After having completed 2 trips setting lobster traps and when she was some 10 miles from Argyle on her third trip, water was observed for the first time in the accommodation; the water had reached a height of some 60 cm in the engine-room covering the base of the engine. The engine was placed in neutral and no overside discharge from the automatic electric bilge pump was observed. The engine-driven pump was then engaged but after discharging the water for about 1 minute, the discharge ceased although the pump was apparently still working.

Inspection of the lower inside of the hull could not be made due to the water accumulation in the bottoms of the accommodation and engine-room: access to the aft void space was not possible due to the stow of traps on the well deck. Unable to assess the situation, it was feared that the hull had been breached, that seawater was entering rapidly and the vessel was in danger of sinking. Thus, 2 other fishing vessels were contacted on VHF R/T and arrived on-scene some 15 minutes later. In the meantime, 80 lobster traps were thrown overside and the water level reduced by the use of hand pump and also by bailing using 2 adopted plastic containers. She was then escorted back to Argyle by the fishing vessels.

Subsequent inspection revealed that the electric automatic pump had stopped due to a length of discarded electric wiring becoming entangled in the pump mechanism; the main engine-driven pump was found to be in good condition but its suction had become blocked with refuse which had accumulated in the engine-room bilge. Further, the accumulation of water was attributed to the continuing heavy rain and sprays shipped over the wheel-house and the well deck gunwales while operating during 10 hours in rough seas.

There were no injuries or pollution as a result of the incident. Repairs to the pumps were carried out at nominal cost.



"JUANITA LOUISE"

Findings

The small Canadian fishing vessel of open construction "JUANITA LOUISE" flooded with rain water and sea spray while operating in adverse weather conditions when the two principal pumps had been rendered inoperable leading to the belief that the hull had become breached. Subsequent use of bailers and a hand pump revealed that the pumps had been rendered inoperable due to the following factors:

- discarded electric wiring used during maintenance and repairs jamming the automatic electric pump mechanism;

- the protective straining device (strum box) at the mechanical pump suction had become inoperative due to corrosion; and

- refuse which had accumulated in the bilge was drawn into the mechanical pump suction through the faulty strum box.

Other Findings

There was no routine inspection and/or cleaning of bilges, contrary to the dictates of good seamanship.

There was no routine testing of pump operations or suctions, contrary to the dictates of good seamanship.

Reliance had been placed on an automatic pump continuing to operate with the consequent belief that when the flooding was discovered it had been rapid and via a breach in the hull.

Drainage to the pumps, of necessity, relied on an open hatch cover.

4. "BARBARA ANN IV"

Capsize and sinking off Dover Harbour, N.S., November 28, 1988.

Summary

The 10 gross ton wooden gillnetter/lobster fishing vessel "BARBARA ANN IV" was loaded with 75 wooden lobster traps in the well deck and on the upper deck. There were 4 athwartship rows, 4 tier high loaded to a height of some 2 m above the upper deck; the full stow completely covering both decks. Four independent rope lashings were secured at each side of the top deck and stretched up and over each row of traps and secured in position. The vessel, with a crew of 4, departed West Dover, N.S., at 0700 November 28, 1988 in SW winds at 15-20 knots, moderate seas of upto 1 m in height, overcast skies and about 6 miles visibility.

After steaming for some 1.5 miles, the vessel headed south and laid the first set of 15 traps in a north-south direction. As the vessel was being turned to port in order to run a parallel line to the northward, the effect of the seas on her starboard side caused the vessel to roll first, causing the traps to move slightly and resulting in her listing heavily to port. As she continued to turn, a wave from the port quarter rolled her heavily to starboard and the shifting of the traps caused her to list heavily to starboard. The seas then rolled her further to starboard until her bulwark-top was immersed and down flooding of the engine-room and accommodation commenced. She remained on her starboard beam for about 15 minutes before she eventually sank.

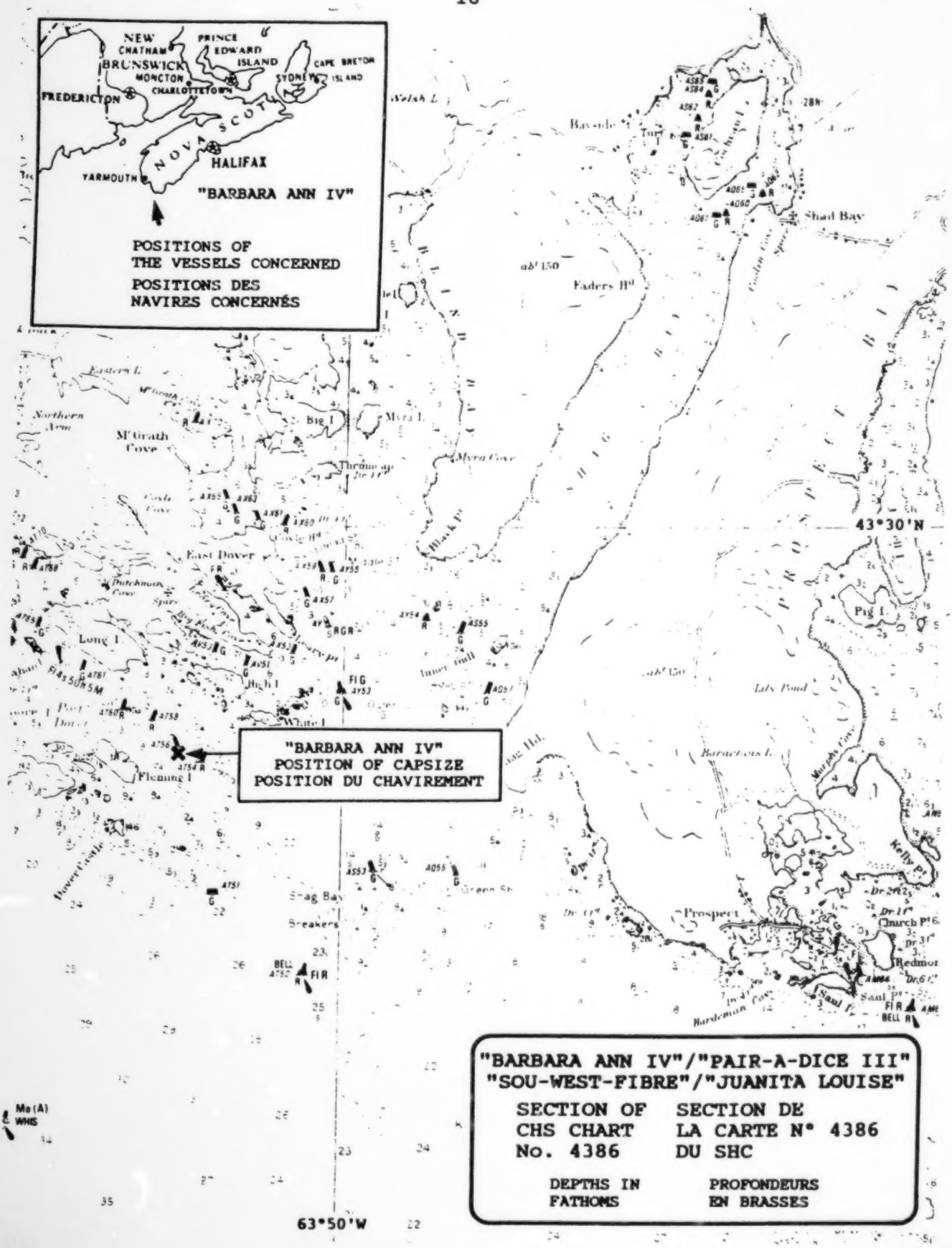
Due to the length of the painter, it took the crew some 10 minutes to inflate the inflatable liferaft that was thrown in the water. Another vessel who saw the "BARBARA ANN IV" capsize proceeded to assist and rescued all crew members to safety. The vessel was a total loss with an estimated value of $21,000.

Findings

The small Canadian fishing vessel of open construction "BARBARA ANN IV", capsized and sank while setting lobster traps in rough sea conditions.

It would seem that the contributing factors to the loss were as follows:

- the number of traps carried was excessive inasmuch as their height of stow reduced the initial stability to a critical extent especially in view of the sea



"BARBARA ANN IV"/"PAIR-A-DICE III"
"SOU-WEST-FIBRE"/"JUANITA LOUISE"

SECTION OF CHS CHART No. 4386

SECTION DE LA CARTE N° 4386 DU SHC

DEPTHS IN FATHOMS

PROFONDEURS EN BRASSES

conditions prevailing outside of the harbour;

- turning in the rough seas caused the vessel to roll heavily and the traps to shift within their lashings, causing the vessel to list; and

- the combined effect of reduced stability and list caused the immersion of the bulwarks as the vessel rolled with consequent down-flooding and loss of reserve buoyancy.

Other Findings

Due to the length of the painter, it took the crew in the water about 10 minutes to inflate the liferaft.

The crew were not fully versed in the operation nor in the contents of the raft.

The close proximity of the rescuing fishing vessel was fortunate, particularly for the person who remained in the sea while holding a lifejacket.

General Findings

The inshore fishery which includes lobster fishing has been transformed in recent years from an occupation based largely on traditional skills, with little constraint of time and quotas, to a capital-intense highly regulated industry resulting in:

- many fishermen, including those involved in these 4 casualties, disregarding safety factors in favour of financial gains more so during the opening day of the season;

- an excessive number of traps being carried than is safe and practical to the detriment of the vessel's transverse stability;

- inattention to, or disregard for, adverse weather conditions that could adversely affect the vessel's transverse stability; and

- vessels proceeding in poor visibility at speeds considered to be unsafe and/or taking navigational risks resulting in grounding of vessels as in two of these casualties.

"AQVIQ"

Drowning accident at Harbour Grace, Nfld., January 1, 1989.

Summary

The 1129 gross ton Canadian shrimp factory/stern trawler "AQVIQ" was secured starboard side alongside the fish plant wharf at Harbour Grace, Nfld. Another fishing vessel, "KIVIUQ-I", was secured outboard of the "AQVIQ". Appropriate means of access by way of gangways were provided between the vessels and from the "AQVIQ" to the wharf. A watchman was assigned to the "AQVIQ" whilst she lay alongside the fish plant wharf and the engineer and factory chief remained on board. Some snow and ice had accumulated on the wharf and the vessels, making conditions underfoot very slippery.

On the morning of January 1, 1989, winds were easterly at 15 knots and shifted to north-west 20 knots in the afternoon. Air temperature ranged from -4°C to -10°C and the water temperature was 0°C.

As per travel arrangements, 11 Inuit deck-hands had departed from various northern communities to join their vessels at Harbour Grace on December 31, 1988. Some alcohol had been consumed during their travel.

All hands, including Mr. Akulukjuk, went on board the "AQVIQ", deposited their luggage on board and went to a bar nearby. At about 0300, January 1, 1989 after further drinking, Mr. Akulukjuk, in company with three other persons, returned to the "AQVIQ". He was seen, with two other deck-hands, drinking wine in the galley of the "AQVIQ" until 0500-0600. He was described as being quite inebriated and was not seen by any of his colleagues thereafter.

Mr. Akulukjuk was reported missing to the RCMP on January 2, 1989, by the ship's operations manager.

An extensive search was conducted by the RCMP detachment throughout the vessel "AQVIQ", alongside the wharf and the fish plant; a diver's search was carried out in the water beneath the wharf but to no avail.

On January 8, 1989, the body of Mr. Akulukjuk was found on the beach in Harbour Grace. An autopsy carried out on January 10, 1989, revealed the cause of death to be due to drowning as a result of submersion in sea water. Acute alcohol intoxication was also discovered and there was no indication to suspect foul play.

Findings

On or about January 1, 1989, Mr. Akulukjuk, a crew member of the Canadian fish factory/stern trawler "AQVIQ", lost his life due to drowning. In the absence of any witnesses, the precise reason for Mr. Akulukjuk's fall into the frigid waters of Harbour Grace is not known. However, it would appear that the following factors contributed to this incident:

- Mr. Akulukjuk was intoxicated and may have fallen from either vessel or from the wharf; and

- conditions underfoot at the time were slippery.

Following his fall, Mr. Akulukjuk lost his life and it would appear that the following factors contributed to his death:

- immersion in the frigid water which limited his survival time; and

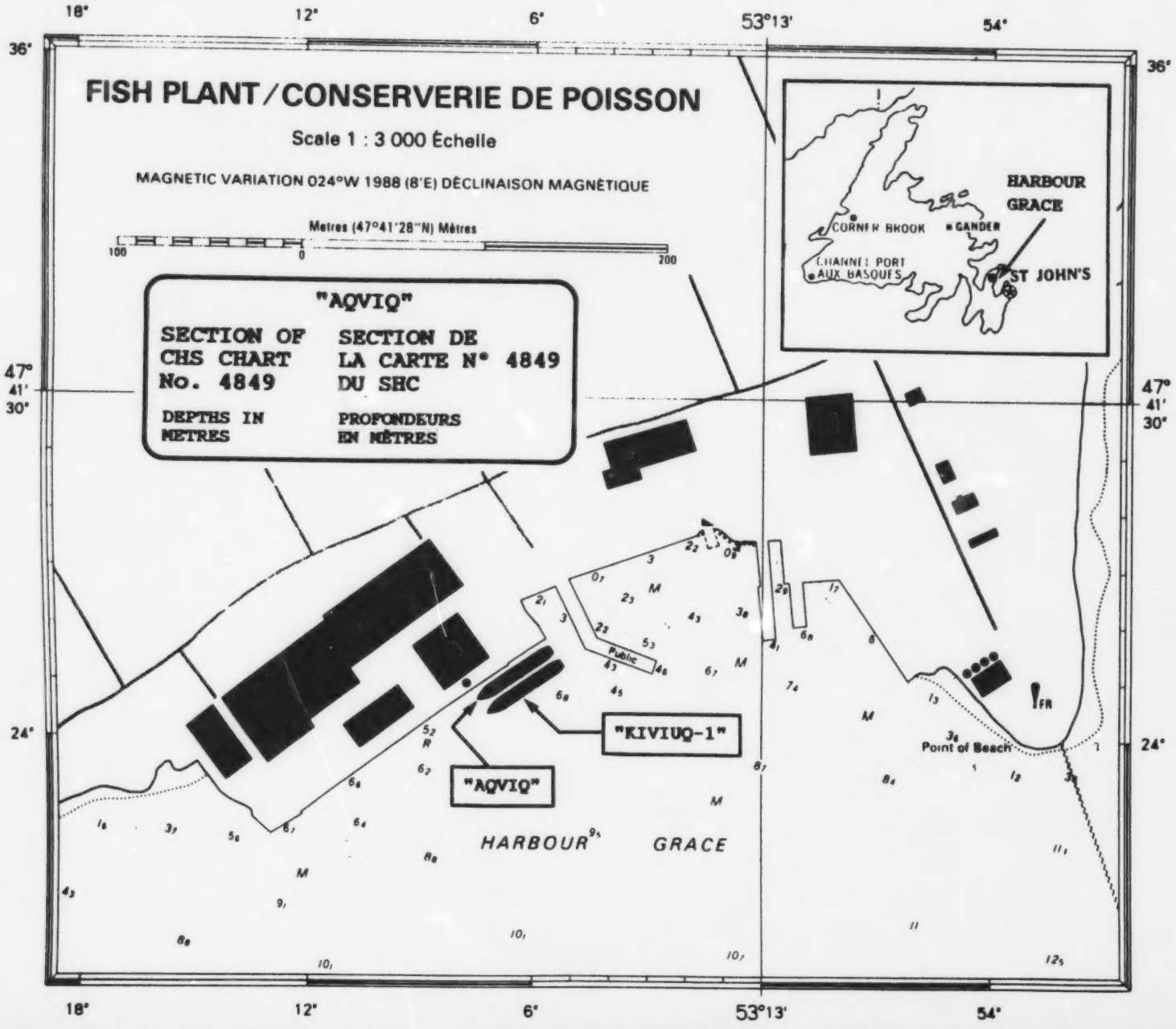
- the consumption of alcohol and wearing light clothing further reduced his survival time.

Other Findings

The majority of the victim's shipboard colleagues were intoxicated at the approximate time of the accident.

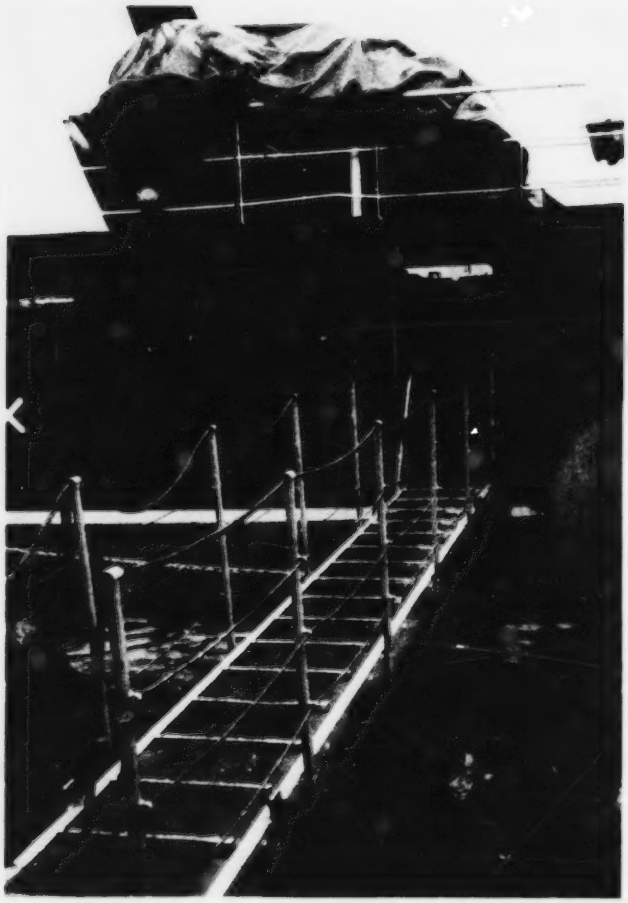
There was a delay in reporting the accident to the RCMP and to the Marine Casualty Investigations division of Transport Canada.

The gangway arrangements between the two fishing trawlers and from the "AQVIQ" to the wharf were in compliance with the Regulations.


FISH PLANT / CONSERVERIE DE POISSON
Scale 1 : 3 000 Échelle
MAGNETIC VARIATION 024°W 1988 (8'E) DÉCLINAISON MAGNÉTIQUE
Metres (47°41'28"N) Mètres
100
0
200
"AQVIQ"
SECTION OF CHS CHART No. 4849
SECTION DE LA CARTE N° 4849 DU SHC
DEPTHS IN METRES
PROFONDEURS EN MÈTRES
HARBOUR GRACE
CORNER BROOK
GANDER
CHANNEL PORT AUX BASQUES
ST JOHN'S
"KIVIUQ-1"
"AQVIQ"
Public
Point of Beach
FR
HARBOUR GRACE
18°
12°
6°
53°13'
54°
36°
47° 41' 30"
24°

"AQVIQ" secured starboard side alongside the fish plant at Harbour Grace.

Le "AQVIQ" amarré du côté tribord le long de l'usine de transformation de poisson de Harbour Grace.



Gangway arrangement with net underneath at the starboard access door.

Disposition de la passerelle d'embarquement munie d'un filet en-dessous de la porte d'accès de tribord.

"J. L. N."

Fire and subsequent sinking, Meteghan, N.S., January 2, 1989

Summary

The 66 gross ton wooden scallop dragger, "J.L.N." was built in 1987 at Cape St. Mary, N.S. Her hull was transversely divided into four compartments comprising the accommodation forward, followed by engine-room, fish hold and lazaret. A heating stove, 1 m from the shipside, was located in the engine-room forward of the port fuel tank. Located in the engine-room approximately 0.4 m from the stove and vent pipes were two bilge discharge pipes, both discharging above the water line, one of galvanized metal and one of a plastic material. Also in the vicinity but lower was located a plastic sewage discharge pipe.

On December 26, 1988 whilst the vessel was laid-up in Meteghan berthed outside of 4 other vessels, the water circulating pump on the heating stove was replaced by a local firm; reportedly no hot work was carried out and none of the workers was a smoker. The vessel was last checked on January 1, 1989 by the repair firm when everything was in order and the vessel was locked up at about 1800. Shore power supplied 110 V electricity to the water circulating pump for the heating stove and a light, both of which were located in the engine-room.

Winds were east at 5 knots with a low overnight air temperature of -15^{o} and some sea smoke on the water.

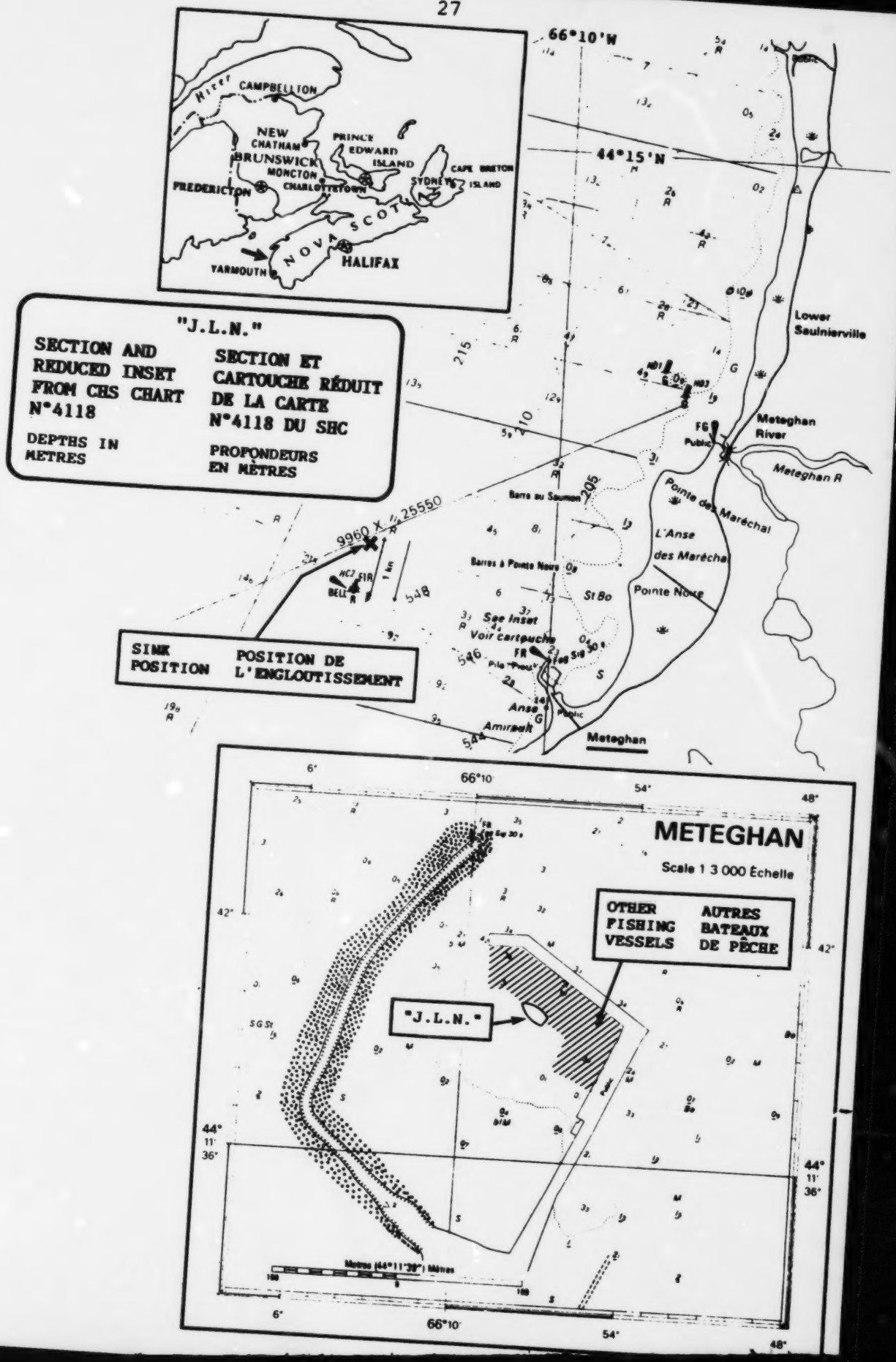
At about 0100, January 2, when smoke was observed emanating from the vents aboard the fishing vessel, an alarm was raised. The local fire department arrived on the scene and attempted to extinguish the fire using foam and water mixture. As these efforts were unsuccessful, the vessel was towed out of the harbour with the intention of beaching her, in order to prevent the fire spreading to other vessels or the wharf.

At approximately 0210 the tow rope to the "J.L.N." burnt through before the vessel could be beached and the "J.L.N." continued to drift slowly offshore. The tow rope could not be reconnected due to the intensity of the fire.

The "J.L.N." was later observed to have sunk in approximate position 44^{o}12'25"N, 66^{o}11'38"W. A typical replacement value of the vessel is in the region of $500,000.

Findings

The fishing vessel "J.L.N." caught fire in Meteghan Harbour on January 2, 1989. The cause of the fire remains undetermined, however, indications are that it may have been as a result of a malfunction in the heating stove.


66°10'W
44°15'N
CAMPBELLTON
NEW BRUNSWICK
PRINCE EDWARD ISLAND
CAPE BRETON ISLAND
MONCTON
CHARLOTTETOWN
SYDNEY
FREDERICTON
NOVA SCOTIA
HALIFAX
YARMOUTH
"J.L.N."
SECTION AND REDUCED INSET FROM CHS CHART N°4118
SECTION ET CARTOUCHE RÉDUIT DE LA CARTE N°4118 DU SHC
DEPTHS IN METRES
PROFONDEURS EN MÈTRES
SINK POSITION
POSITION DE L'ENGLOUTISSEMENT
9960 X 25550
See Inset
Voir cartouche
Lower Saulnierville
Meteghan River
Pointe des Maréchal
L'Anse des Maréchal
Pointe Noire
Meteghan
METEGHAN
Scale 1 3 000 Échelle
OTHER FISHING VESSELS
AUTRES BATEAUX DE PÊCHE
"J.L.N."
66°10'
44° 11' 36"

F.V. "J.L.N."
when launched
February 17, 1988.

B.P. "J.L.N."
quand il a
été lancé
le 17 février 1988.

Note: Sanitary discharge pipe on port side.

Nota: Tuyau de décharge pour service sanitaire sur le côté bâbord.

"PACIFIC WARRIOR"

Capsizing, sinking, Albert Head, B.C., January 3, 1989.

Summary

The 28 gross ton, "PACIFIC WARRIOR", built as a longliner in 1972, was subsequently converted to a stern trawler necessitating in top-weights being added to the vessel. This adversely affected the vessel's transverse stability and reduced her loaded freeboard; however, she had operated satisfactorily in this trawling mode for some years. Her cabins forward, housed the wheel-house and accommodation with the engine-room beneath.

She departed Victoria, B.C., January 3, 1989, with a crew of 2, and after setting her trawl off Albert Head, commenced trawling in an easterly direction at 0915. By 1000, winds had increased to W'ly 35-40 knots with 1.2-1.8 m seas. At 1015, with the engine clutch disengaged and the vessel broadside to the seas, the skipper commenced hauling in the trawl. The cod-end, with a catch of some 907 kg was hoisted over the starboard side and placed on deck. The skipper then put the engine in gear, increased speed to 800 r.p.m. and ad-justed the autopilot. He headed into the wind and then lifted and placed the fish on top of the hatch cover. As the deck-hand began hauling at the net aft, the vessel rose on a large swell and quickly sheered to port. The lift controls were disengaged and the fish dropped onto the hatch cover. The skipper then entered the wheel-house, disengaged the autopilot and placed the wheel hard-to-starboard. The vessel did not respond and began listing to port causing the fish to slide and come to rest against the port bulwark once again remaining suspended from the boom. With the port bulwark now submerged, down-flooding commenced from the now displaced fish hold hatch cover and the vessel lay on her port beam ends. The deck-hand was thrown into the water and despite difficulties, the skipper eventually managed to send "MAYDAY" on Channel 16 VHF thus initiating an official SAR response. The crew abandoned the vessel, boarded a liferaft and were sub- sequently rescued at 1117. A typical value for this class of vessel being in the order of $300,000.

Findings

The Canadian small fishing vessel "PACIFIC WARRIOR" capsized, downflooded and sank while retrieving her trawl net in poor weather conditions off Albert Head, Vancouver Island, B.C., January 3, 1989.

It would appear that the vessel's transverse stability

and that the following factors contributed to her loss:

- the vessel, while being steered by autopilot in deteriorating weather conditions, sheered to port under the influence of a larger than average wave and developed a heel to port;

- the initial port heel was maintained as the autopilot control was removed and hard-to-starboard helm manually applied;

- while the vessel was reacting to the impetus of the sudden wave action, the retrieved cod-end of the trawl net containing approximately 1 tonne of fish was concurrently suspended and acting at the head of the topped-up boom, so reducing the vessel's transverse stability;

- on being lowered onto the top of the main hatch cover, the fish catch shifted to port increasing the angle of heel;

- the combined dynamic heeling effects submerged the port side deck edge and bulwark toprail, and the weight and free-surface effect of the shipped water further reduced the transverse stability;

- the shipped water increased the angle of heel, displaced the unsecured main hatch cover and downflooded into the fish hold; and

- the vessel was heeled to her beam ends and downflooding progressed to other compartments below the main deck until all reserve buoyancy was lost and the vessel sank.

Other Findings

The skipper routinely left the autopilot unattended while he engaged in other duties.

The autopilot, particularly one based on a magnetic sensing element, is not normally able to effect the correct helm actions required in an emergency heavy listing condition.

There was no time to attempt to retrieve or don the single immersion suit aboard.

lhere was no ready, permanent means for securing the main hatch cover.

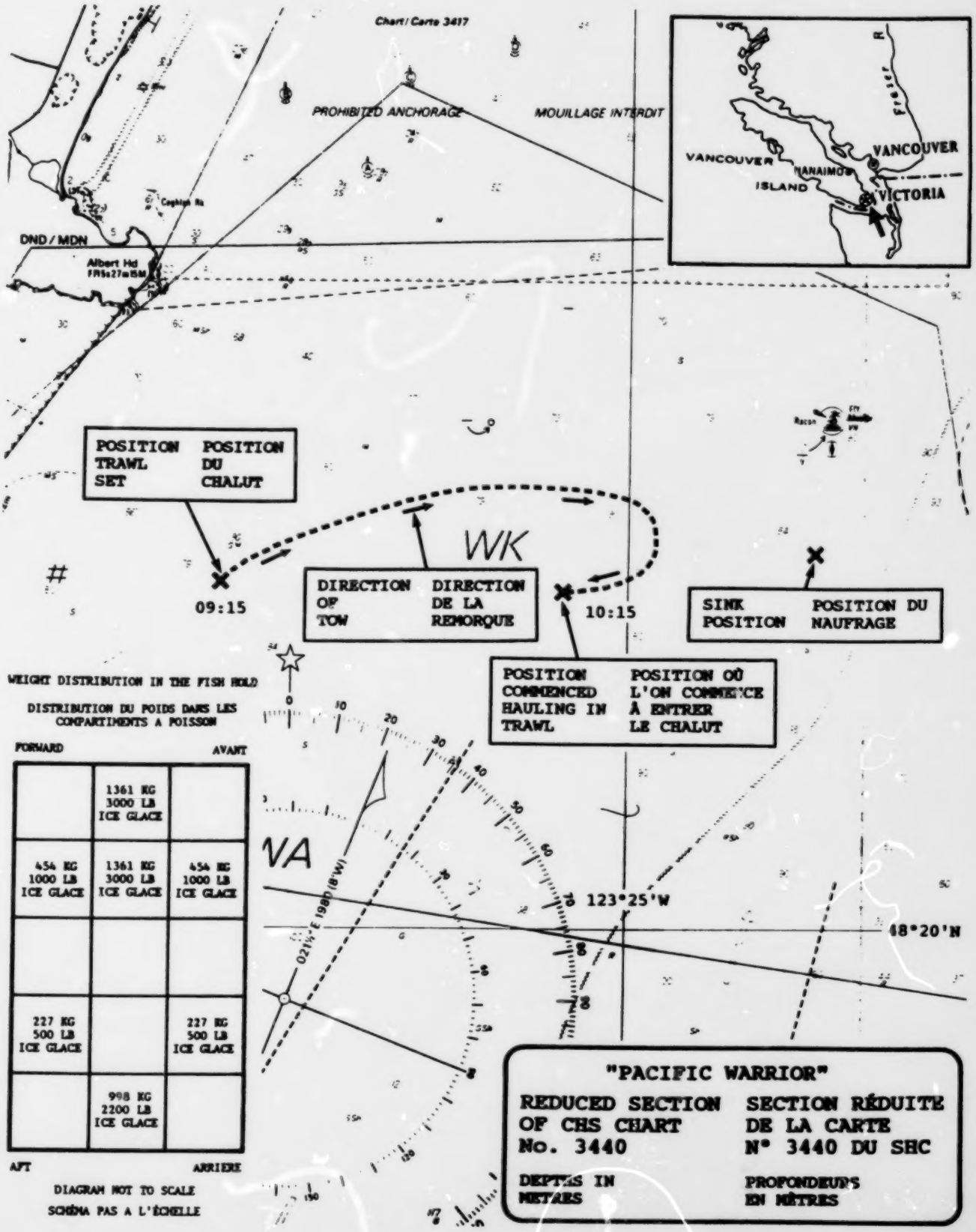
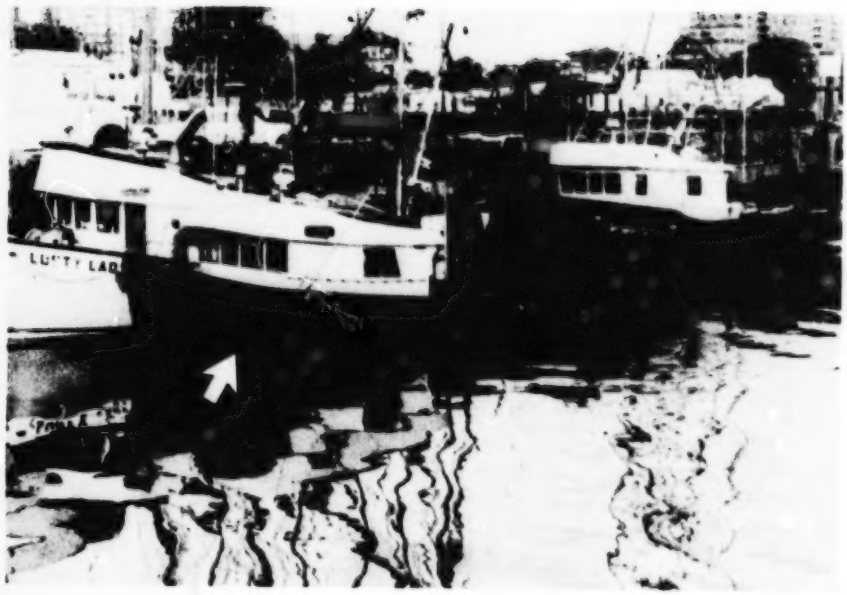
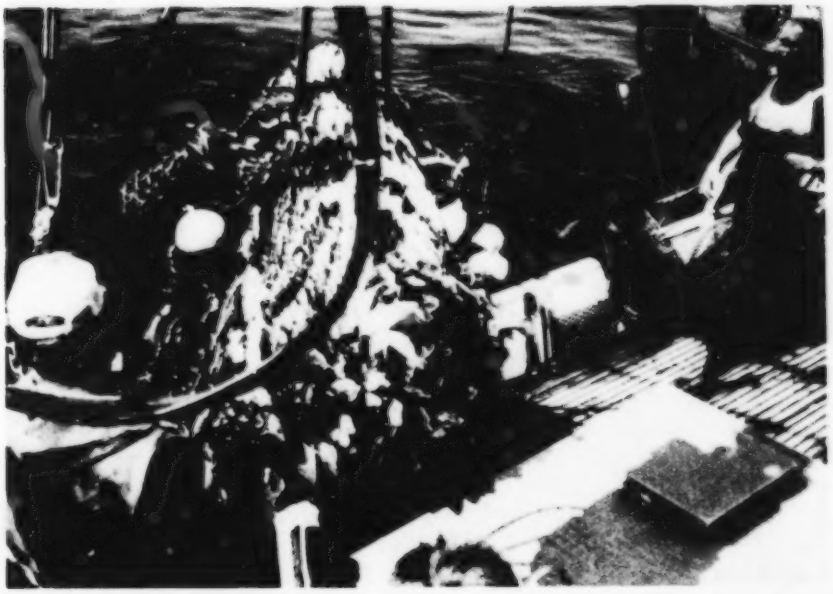


Chart / Carte 3417
PROHIBITED ANCHORAGE
MOUILLAGE INTERDIT
DND / MDN
Albert Hd
VANCOUVER
VANCOUVER ISLAND
NANAIMO
VICTORIA
POSITION TRAWL SET
POSITION DU CHALUT
DIRECTION OF TOW
DIRECTION DE LA REMORQUE
SINK POSITION
POSITION DU NAUFRAGE
POSITION COMMENCED HAULING IN TRAWL
POSITION OÙ L'ON COMMENCE À ENTRER LE CHALUT
09:15
10:15
WK
VA
123°25'W
48°20'N
WEIGHT DISTRIBUTION IN THE FISH HOLD
DISTRIBUTION DU POIDS DANS LES COMPARTIMENTS A POISSON
FORWARD
AVANT
1361 KG 3000 LB ICE GLACE
454 KG 1000 LB ICE GLACE
1361 KG 3000 LB ICE GLACE
454 KG 1000 LB ICE GLACE
227 KG 500 LB ICE GLACE
227 KG 500 LB ICE GLACE
998 KG 2200 LB ICE GLACE
AFT
ARRIERE
DIAGRAM NOT TO SCALE
SCHÉMA PAS A L'ÉCHELLE
"PACIFIC WARRIOR"
REDUCED SECTION OF CHS CHART No. 3440
SECTION RÉDUITE DE LA CARTE N° 3440 DU SHC
DEPTHS IN METRES
PROFONDEURS EN MÈTRES

"PACIFIC WARRIOR"





Note: Procedure similar to the one used at the time of casualty.

Nota: Méthode similaire à celle utilisée au moment du sinistre.

"BUCCANEER BREEZE"

Diving accident in Codfish Passage, B.C., January 22, 1989.

Summary

The 14.92 gross ton Canadian longliner/dragger "BUCCANEER BREEZE" was engaged in long lining off Miles Island in Codfish Passage, B.C., on January 22, 1989. During fishing operations, whilst attempting to haul-in the long-lines that had been set earlier, 2 long-lines parted. Initially, a small grapnel was used to drag for the lost gear and several attempts were made without success. The weather conditions were good with no wind, calm seas and good visibility.

Meanwhile, a deck-hand, who was also a sport diver, donned his dry suit and diving gear. After reassuring the operator that it was alright for him to dive in the prevailing 2-knot estimated current, the vessel was manoeuvred close to shore where the depth of water was about 5-15 fathoms. After arranging the line signals with the crew on board, the deck-hand entered the water at about 1425 taking with him an end of the messenger line in one hand and a knife in the other. Some 20 minutes after the dive, the air bubbles became intermittent and then stopped. The messenger line was cut and buoyed and the vessel commenced searching for the deck-hand. At 1532, CGRS Prince Rupert was informed thus initiating an official SAR response. Despite an extensive search the victim was not found and at 1317, January 23, the case handed over to the RCMP as a missing person case.

Findings

On the afternoon of January 22, 1989 in good weather conditions, a crew member from the F/V "BUCCANEER BREEZE" donned his dry suit and diving gear and while attempting to locate a parted ground line on the eastern side of Codfish Passage, B.C. in about 15 fathoms of water, failed to resurface, some 20 minutes later; an extensive surface and underwater search failed to locate the missing diver.

The precise cause of the loss of the diver is not known, but it would appear that the following factors may have contributed to the casualty:

- the crew, including the diver, lacked diving experience resulting in a general lack of appreciation for basic diving practices;

- the crew member did not adhere to the buddy system

but dived alone in an unfamiliar site; and

- the crew member underestimated the effect of the tide and overestimated his ability to contend with its effect.

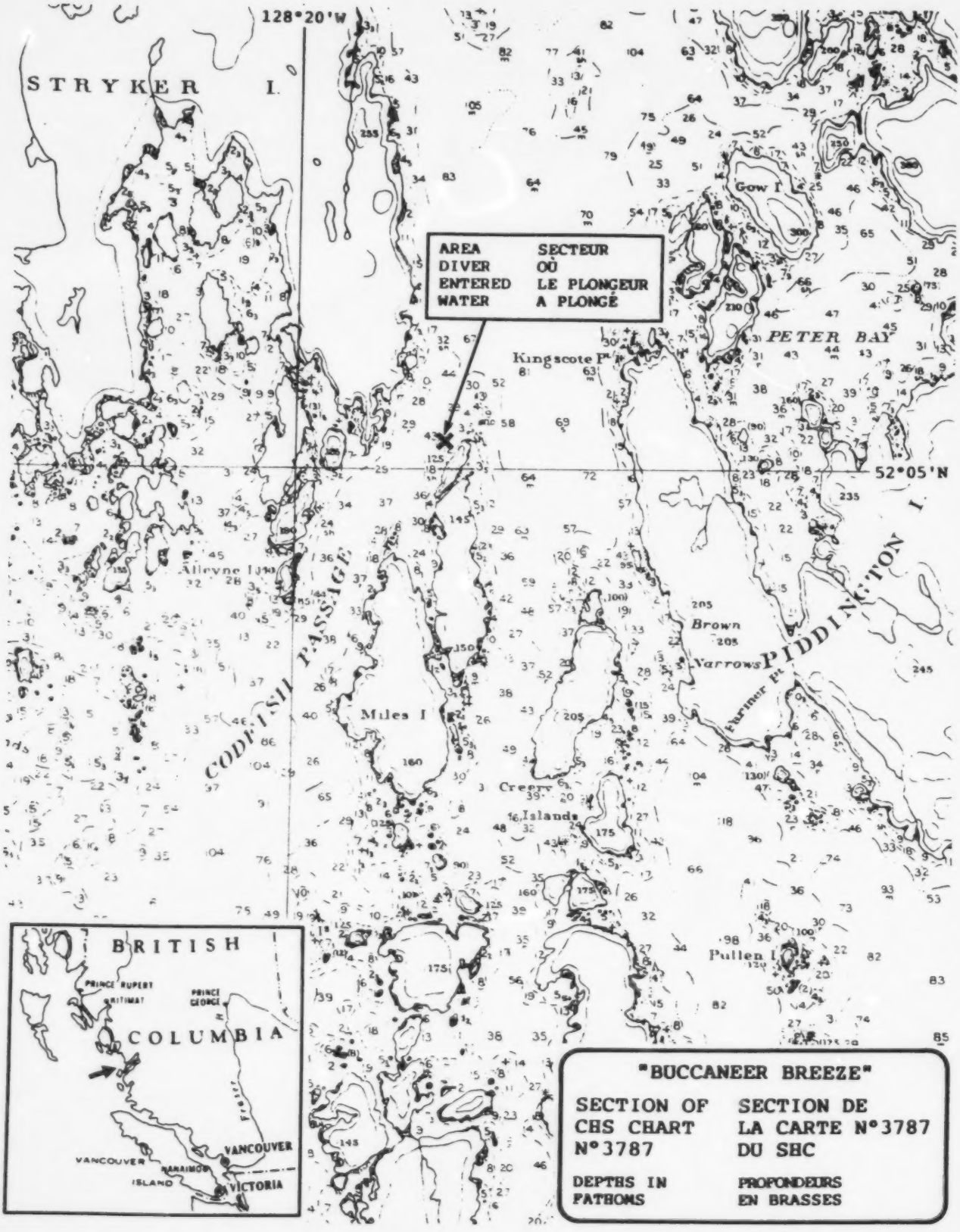
Other Findings

The operator of the vessel tried to dissuade the diver from undertaking this task because of the currents.

Whilst fishing is a federally-regulated industry, there are no specific federal regulations in place governing diving activity associated with fishing operation.

None of the crew were trained in First Aid procedures, and thus may not have been able to revive the diver if he had been recovered unconscious.

The VHF R/T station aboard the vessel was not licensed nor were the crew in possession of a RORC (Maritime).


128°20'W
STRYKER I.
AREA SECTEUR
DIVER OÙ
ENTERED LE PLONGEUR
WATER A PLONGÉ
Gow I
PETER BAY
Kingscote Pt
52°05'N
Alleyne I
CODFISH PASSAGE
Brown
Narrows
PIDDINGTON I.
Farmer Pt
Miles I
Creery
Islands
Pullen I
BRITISH
COLUMBIA
PRINCE RUPERT
PRINCE GEORGE
VANCOUVER
VANCOUVER ISLAND
VICTORIA
"BUCCANEER BREEZE"
SECTION OF CHS CHART N°3787
SECTION DE LA CARTE N°3787 DU SHC
DEPTHS IN FATHOMS
PROFONDEURS EN BRASSES

"BUCCANEER BREEZE"

"PAC RAT"

Diving accident with loss of a life, Drew Passage, B.C., January 23, 1989.

Summary

The 11 gross ton ex-military landing craft "PAC RAT" was converted for use in sea food harvesting and operated in the sheltered waters of the B.C. coast.

At 0830, January 23, 1989, the "PAC RAT" departed Heriot Bay, B.C., with a crew of 5, bound for the fishing grounds close to the eastern shore of Read Island, B.C., in order to harvest green sea urchins.

Some of the crew had breakfast and prepared the diving gear. Upon arrival at the grounds around 1000, one of the two divers made an exploratory inspection of the sea bottom and having selected a spot, the vessel was anchored. A second diver donned his diving gear and at 1100 dived alone from the port side of the vessel; a surface air supply diving system was in use. He was seen moving away towards the rocks however, the attention of his shipboard diver's tender was diverted momentarily towards the preparation of the bag lines. Some four minutes later, the diver's tender and the operator looked towards the area where the diver had been and noticed there were no air bubbles coming from his air hose. They saw him motionless, in an upright position, with his hands outstretched, at a depth of some 7 metres. They hauled on his safety line, removed him from the water and noticed that there was pink coloured liquid in his face mask. They immediately recalled another diver, dropped the weights from the victim and put him on the working table. Whilst the operator was making an emergency call to Comox Coast Guard Radio, the other crew members drained the water out of the victim's lungs and administered CPR and AR.

At 1154, a SAR helicopter arrived on-scene and airlifted the victim to a hospital at Campbell River. An autopsy revealed the cause of death to be due to drowning.

Investigation revealed the following:

(a) a small split was found in the mouthpiece which formed part of the diving gear;

(b) the diver's tender, who fastened a rubber knife strap which was intended to improve the seal of the suit, round the diver's neck, reportedly expressed concern regarding the tightness of the strap;

(c) the victim reportedly complained about his sinuses and had taken a couple of Dristan tablets; and

(d) the victim was over-ballasted; the total weight comprising some 45 kg.

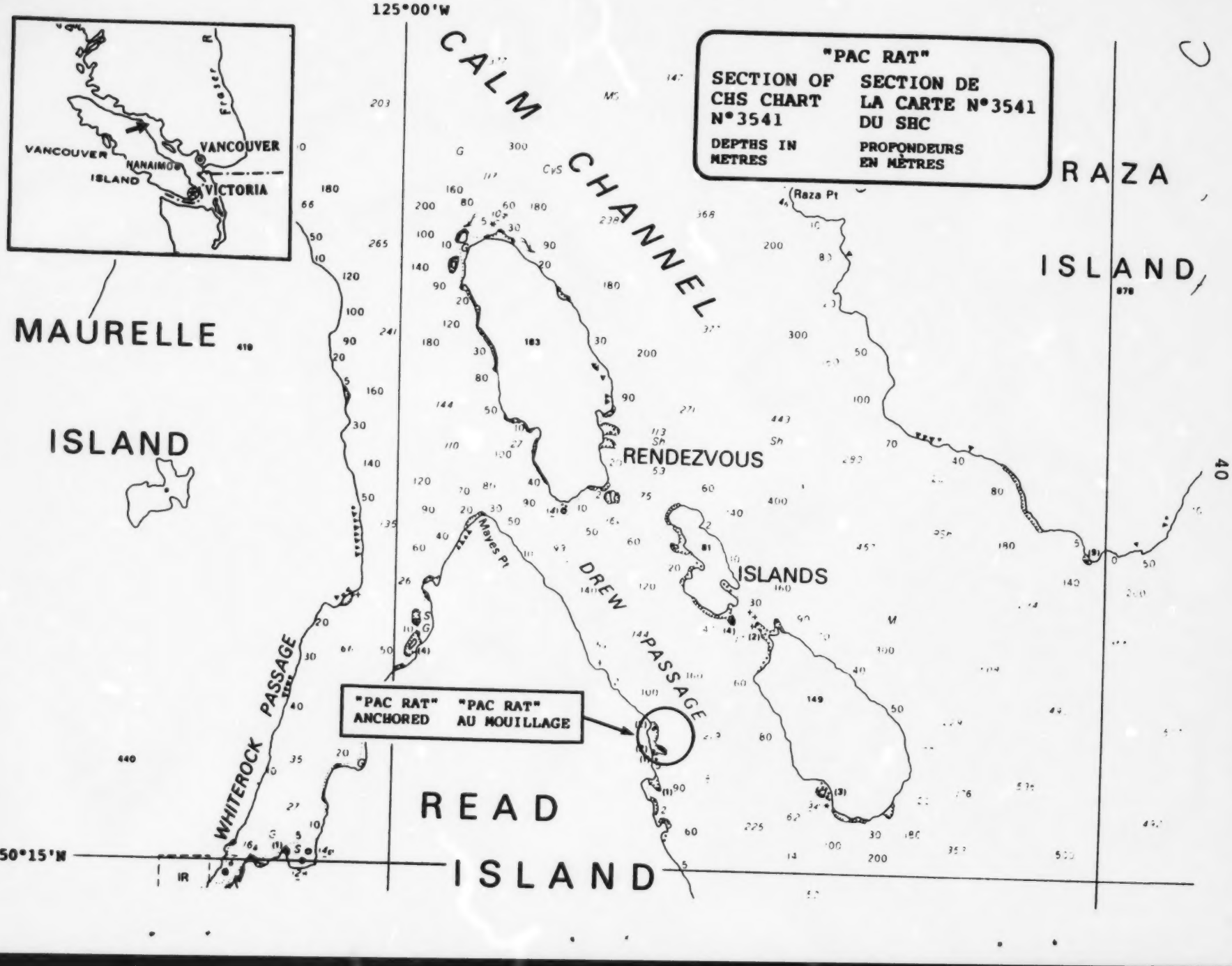
Findings

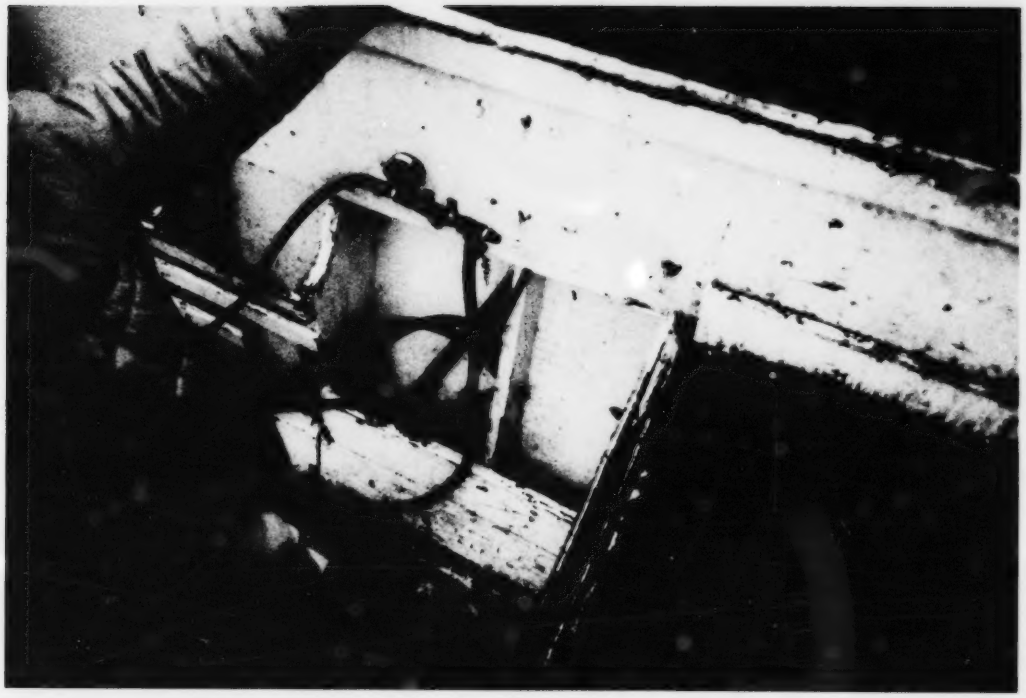
Terry Herchak lost his life due to drowning in a diving accident after he was some four minutes in the water at a depth of approximately seven metres. There is no conclusive evidence as to the cause of his death however it would appear that the following could have been contributing factors:

- a light blow to the mouth area caused a split in the mouthpiece;
- ingress of water into his mouthpiece causing coughing and loss of mouthpiece;
- the combined effect of pressure and sinus congestion;
- restriction of blood supply to the brain because of the tightness of the neck strap; and
- an inability to resurface in an emergency as a result of being over-ballasted.

Other Findings

In the absence of any specific federal commercial Diving Regulations in the federally regulated fishing industry, the B.C. Workers' Compensation Board has asserted regulatory authority within the confines of the Workers' Compensation Act of British Columbia.


"PAC RAT"
SECTION OF CHS CHART N°3541
SECTION DE LA CARTE N°3541 DU SHC
DEPTHS IN METRES
PROFONDEURS EN MÈTRES
125°00'W
50°15'N
CALM CHANNEL
MAURELLE ISLAND
RAZA ISLAND
READ ISLAND
RENDEZVOUS ISLANDS
DREW PASSAGE
WHITEROCK PASSAGE
Raza Pt
Mayes Pt
"PAC RAT" ANCHORED
"PAC RAT" AU MOUILLAGE
VANCOUVER
VICTORIA
NANAIMO
ISLAND
FRASER R.
IR



"PAC RAT" - Air 'Tee' connector.

"PAC RAT" - Connecteur d'air en 'T'.

Ankle weights.

Poids aux chevilles.

"DME II"

Grounding off entrance to Lockporte, N.S.
January 30, 1989.

Summary

The 66 gross ton, 16.79 m long wooden fish dragger "DME II" was equipped with 2 radars, 2 echo sounders, 2 Loran Cs, 3 VHF R/Ts, a SSB, a magnetic compass and an auto-pilot.

After fishing for some 40 hours and netting a catch of some 11,000 kg of ground fish, the vessel, with a crew of 3, departed the fishing grounds at 1730, January 30, 1989 for her return to Shelburne, N.S., some 30 miles distant. There was no set pattern of rest periods during fishing operations. After informing the mate to call him some 30 minutes prior to arrival, the skipper turned in. The winds were from the SW at 10-15 knots, slight seas, low SW'ly swell and dense fog with rain which reduced visibility to some 15 m at times. Of the 2 radars, one was on stand-by and the other had been used on various ranges but after reaching the approaches, it was set on the 3 mile range; the navigation then relied solely on radar. With no course lines on the chart and no positions plotted, the vessel headed northerly towards the landfall buoy Mo(A) intending to follow the track as shown on the attached chartlet.

At 2200, the skipper took over the conduct of the vessel and the mate remained in the wheel-house to assist. A radar target believed to be the landfall buoy was some 2 miles ahead and was eventually passed some 0.5 miles to port but was not sighted visually. As the vessel was further east, Cape Roseway was not picked up on the 3 miles range set on the radar and the echo of the landfall buoy was then discounted as being that of a vessel. When Bony Point on Berrys Island became visible on the radar bearing 45° on the port bow, it was believed to be Cape Roseway. Consequently, a northerly course was continued for a further 15 minutes until abeam of Berrys Island and the vessel's course was then altered to NW.

When the skipper realized that the vessel was not in the position she was thought to be, the steering was switched to hand mode, the engine stopped and put to full astern. This action was too late and the vessel grounded on a shoal to the north of Blue Gull Island at 2230.

Initial attempts to refloat the vessel using her engine failed. The ingress of water into the fish hold was contained with the use of bilge pump. CGRS Yarmouth was

informed. About an hour later the "DME II", with assistance from another fishing vessel, was refloated and towed to Shelburne, N.S.

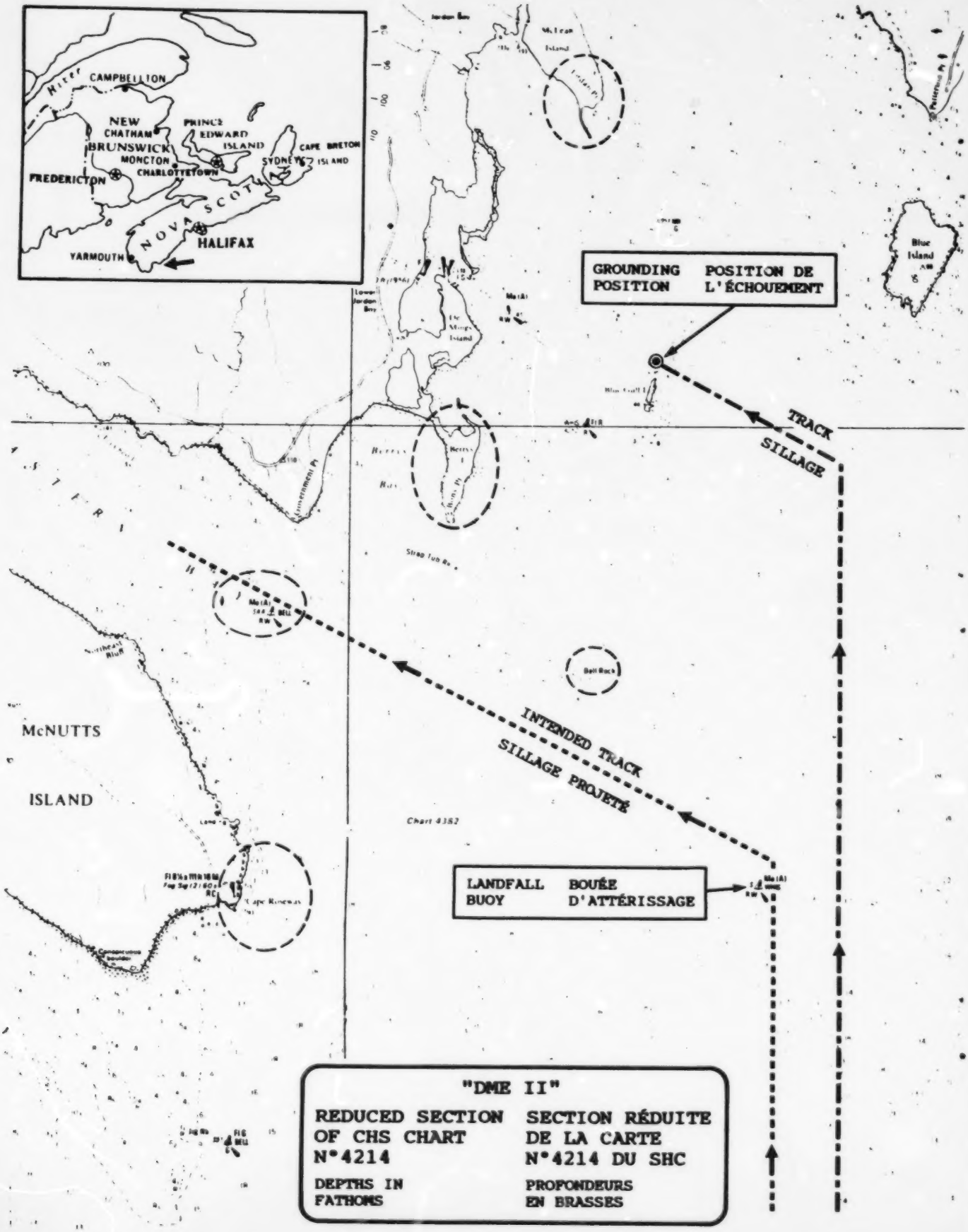
Underwater inspection revealed that the keel and hull had been damaged and the rudder was missing. After discharging her catch, the "DME II" was towed to Meteghan where repairs were carried out at a cost of some $40,000.

Findings

The Canadian fishing vessel "DME II" grounded at slow speed on a rock shoal, incurring hull and rudder damage, as a result of an error in navigation while navigating the approaches to Shelburne, Nova Scotia, in darkness and dense fog.

It would appear that the following factors contributed to the grounding:

- the passage through the approaches was not sufficiently pre-planned;
- the radar was not effectively used in that the radar range was not changed to detect distant echoes at early stages;
- fatigue was a factor in the navigational error;
- the vessel's progress was not effectively monitored;
- the available electronic navigation aids comprising the Loran Cs and Loran C plotters were not utilized; and
- navigational marks (land masses and buoys) were not positively identified.


CAMPBELLTON
NEW BRUNSWICK
CHATHAM
MONCTON
FREDERICTON
PRINCE EDWARD ISLAND
CHARLOTTETOWN
SYDNEY
CAPE BRETON ISLAND
NOVA SCOTIA
HALIFAX
YARMOUTH
GROUNDING POSITION
POSITION DE L'ÉCHOUEMENT
TRACK
SILLAGE
INTENDED TRACK
SILLAGE PROJETÉ
McNUTTS
ISLAND
LANDFALL BUOY
BOUÉE D'ATTÉRISSAGE
"DME II"
REDUCED SECTION OF CHS CHART N°4214
SECTION RÉDUITE DE LA CARTE N°4214 DU SHC
DEPTHS IN FATHOMS
PROFONDEURS EN BRASSES

"DME II" at
Shelburne
after grounding.

"DME II" à
Shelburne
après l'échouement.

"F.V. NORMA JOAN"

Fire and total loss off South-west coast of Nova Scotia, February 6, 1989.

Summary

During the early morning of February 6, 1989, the 45 gross ton Canadian fishing vessel "NORMA JOAN" was engaged in dragging for fish on the Scotian Shelf area, off the south-west coast of Nova Scotia with a crew of three on board.

At 0200, February 6, the crew was called to haul back the fishing gear and in preparation, the main-engine-driven hydraulic pump was engaged from the wheel-house. When the crew arrived on deck, the friction brakes on the winch were found to be frozen to the drum. To free the winch drum, the friction brakes were eased off and the vessel's engine speed increased to full. When this action was not successful, the hydraulic control was engaged to allow the winch to reverse.

Almost immediately at 0215, a blue and white coloured flame was discovered in the engine-room entrance. Another fishing vessel was immediately advised of the situation. Initially a portable fire extinguisher was used to fight the blaze and appeared to have some effect; however, the fire intensified within moments.

The weather conditions were light southerly winds, calm seas and 8 mile visibility.

Assistance was immediately requested from yet another fishing vessel and a second portable extinguisher used in an unsuccessful attempt to fight the blaze. By this time the fire was becoming more intense on the starboard side of the "NORMA JOAN" and the vessel's inflatable liferaft was launched. At approximately 0225, the liferaft was inflated and all three crew members abandoned the burning vessel. At 0240, Yarmouth Coast Guard Radio was advised of the situation by another fishing vessel and by 0247, RCC Halifax had tasked the CCGS "MARY HITCHENS" to assist.

By approximately 0315, the three crew members were rescued from their liferaft by the F.V. "TAMMIE MARY ANNE". The three crew members transferred to the F.V. "MASTER JAMIE" at approximately 0350, and began to use a fire hose in an unsuccessful attempt to extinguish the blaze. By this time the vessel's wheel-house was almost completely consumed along with much of the main deck area.

The three crew members subsequently transferred to the F.V. "CHRIS AND CLAY" and began to recover the burning vessel's net.

The CCGS "MARY HITCHENS" arrived on-scene at 0731 and observed that the "NORMA JOAN" had been extensively damaged by the fire. Consequently, she was instructed by RCC to stand by until the burning vessel sank.

At 0802, the three crew members were transferred to the "MARY HITCHENS" by a fast rescue craft and at 0857, the "NORMA JOAN" sank in position 42°31.5'N, 64°53.3'W, leaving only burnt debris and a dispersing light oil sheen on the surface.

The "MARY HITCHENS" proceeded to Shelburne, Nova Scotia arriving and landing the three crew members at 1600, February 6, 1989.

The vessel's insured value was in the order of $145,000, however, costs for a similar new construction are estimated at $750,000.

Findings

Whilst the cause of the fire originating in the engine-room aboard the Canadian fishing vessel "NORMA JOAN" is not known, of the various possible options it would appear probable that a hydraulic oil leak occurred in the engine-room through a ruptured hose or fitting causing the vapours, resulting from the spray over the hot main engine exhaust and turbo charger, to ignite. Accepting this theory, then it would appear that the following factors contributed to the fire which resulted in the total loss of the vessel:

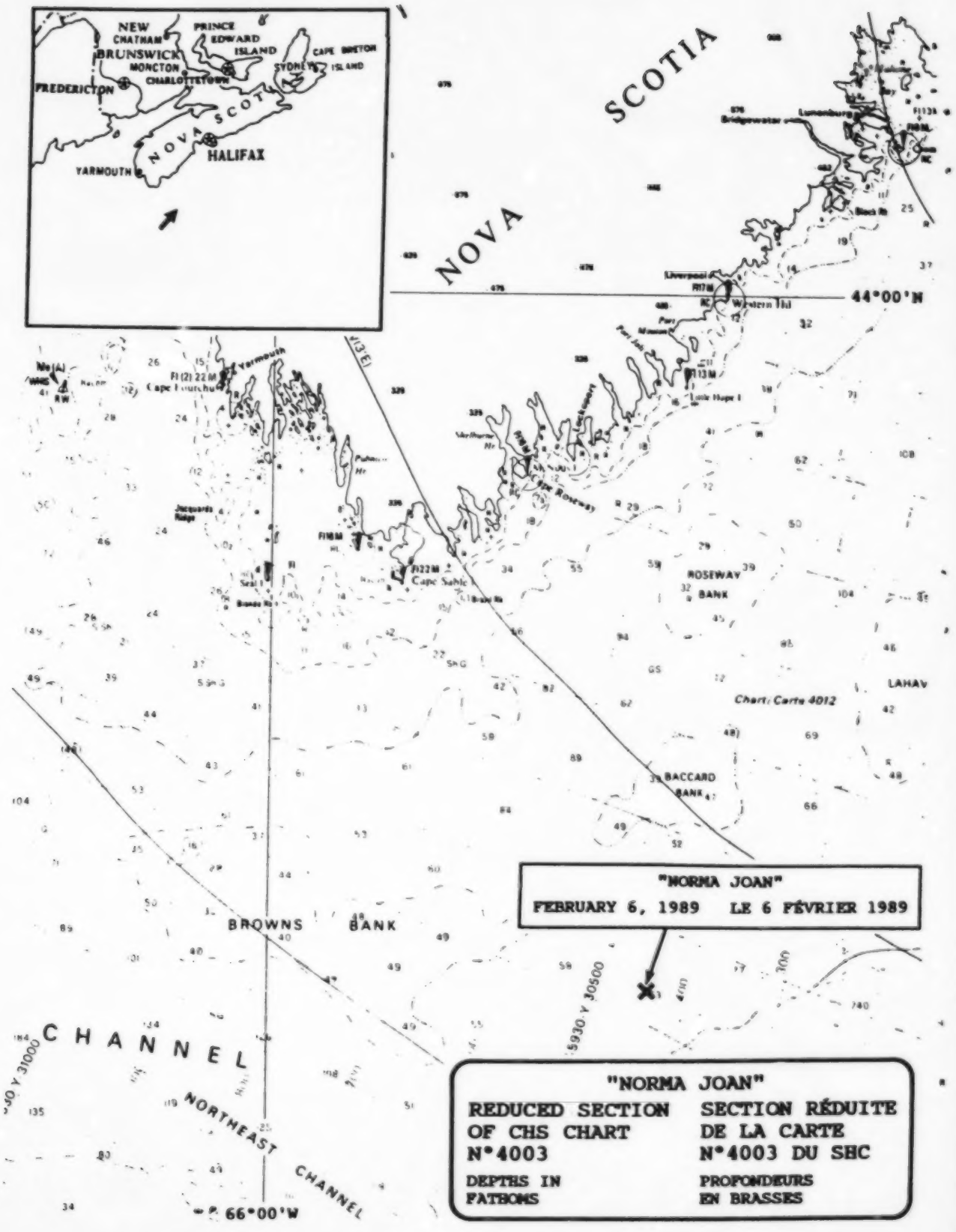
- attempts to free a frozen winch brake with the hydraulic controls engaged resulted in a build up of pressure and a rupturing of the hydraulic hose or fitting;

- although the main engine stopped, the residual pressure in the hydraulic system continued to spray oil thus fuelling the fire;

- the fire, fuelled by oil and natural ventilation, was intense and became rapidly established;

- the stalling of the main engine precluded the use of water to extinguish the fire; and

- the intensity of the fire forced the crew to abandon the vessel, leaving the "NORMA JOAN" to burn to the waterline and sink.


NEW BRUNSWICK
PRINCE EDWARD ISLAND
CAPE BRETON ISLAND
MONCTON
CHATHAM
CHARLOTTETOWN
SYDNEY
FREDERICTON
NOVA SCOTIA
HALIFAX
YARMOUTH
NOVA SCOTIA
44°00'N
Yarmouth
Cape Forchu
Cape Sable
ROSEWAY BANK
LAHAV
Chart: Carte 4012
BACCARD BANK
"NORMA JOAN"
FEBRUARY 6, 1989 LE 6 FÉVRIER 1989
BROWNS BANK
CHANNEL
NORTHEAST CHANNEL
66°00'W
"NORMA JOAN"
REDUCED SECTION OF CHS CHART N°4003
SECTION RÉDUITE DE LA CARTE N°4003 DU SHC
DEPTHS IN FATHOMS
PROFONDEURS EN BRASSES

"NORMA JOAN" showing burned forward section.

"NORMA JOAN" - Avaries causées à la partie avant par l'incendie.

"NORMA JOAN" just prior to sinking.

"NORMA JOAN" juste avant de couler.

"OCEAN DEFENDER"

Grounding and subsequent sinking, Finlayson Channel, B.C., February 12, 1989.

Summary

The 62 gross ton wooden Canadian packer/longliner "OCEAN DEFENDER", of closed construction, was built in 1928 and reported to be in "excellent" condition. Her navigation equipment included a radar, 2 echo sounders, a Loran C, 3 VHF R/T, and a magnetic compass. Her Steamship Inspection Certificate had expired on April 26, 1987.

The "OCEAN DEFENDER", with a crew of 2, departed Port Edwards, B.C. at 1200, February 11, 1989 to rendez-vous with another fishing vessel. Unable to establish contact with the vessel, the "OCEAN DEFENDER" continued on her passage to Bella Bella, B.C. at her full service speed of 9.5 knots. Navigation was by local knowledge following predetermined courses. The watches were alternated between the deck-hand and the skipper.

At midnight, after handing over the watch to the deck-hand with instructions that he be called at 0300, the skipper turned in. At 0240 the "OCEAN DEFENDER" was off Wallace Bight, an area where the chart in use ended and the next chart was required. The last thing the deck-hand recalls is replacing the chart in use; this was some 15 minutes prior to the casualty.

The deck-hand was reportedly feeling very tired but felt that he could stay awake for 20 minutes before calling the skipper at 0300. The next thing he recalls is hearing a loud noise and the skipper inquiring what had happened.

The skipper, awakened by the vessel's impact with a cliff, entered the wheel-house and found the deck-hand confused and half asleep. He throttled down the motor and began to back the vessel clear of the shore and sent the deck-hand to check for damage. The deck-hand found that water was entering the forecastle and the engine-room.

The skipper then entered the engine-room but by this time there was about 0.3 m of water on the engine-room deck. The skipper returned to the wheel-house and slowly idled the vessel alongside the cliff face. He told the deck-hand to put on his immersion suit and prepare to abandon ship; he then sent a 'MAYDAY' on channel 16 VHF at 0323 which initiated an official SAR response.

The crew gathered some supplies and abandoned ship by stepping over the port side and climbing the cliff face. Sometime later, the "OCEAN DEFENDER" was observed to drift into

the channel and subsequently sink in position 52°44'N, 128°28'W, in about 250 fathoms of water.

The crew was rescued at 0539 by another fishing vessel and eventually landed at Whiskey Cove at 1200. There were no injuries. The amount of pollution estimated at 1,346 L of light diesel fuel was dissipated by the action of wind and waves. The replacement cost of the vessel was approximately $450,000.

Findings

On February 12, 1989, the fishing vessel "OCEAN DEFENDER" grounded on the east side of Sarah Island, B.C. while transiting the Finlayson Channel at her full service speed because the deck-hand having the vessel's conduct fell asleep. The vessel subsequently drifted off and sank.

It would appear that the following factors contributed to the grounding:

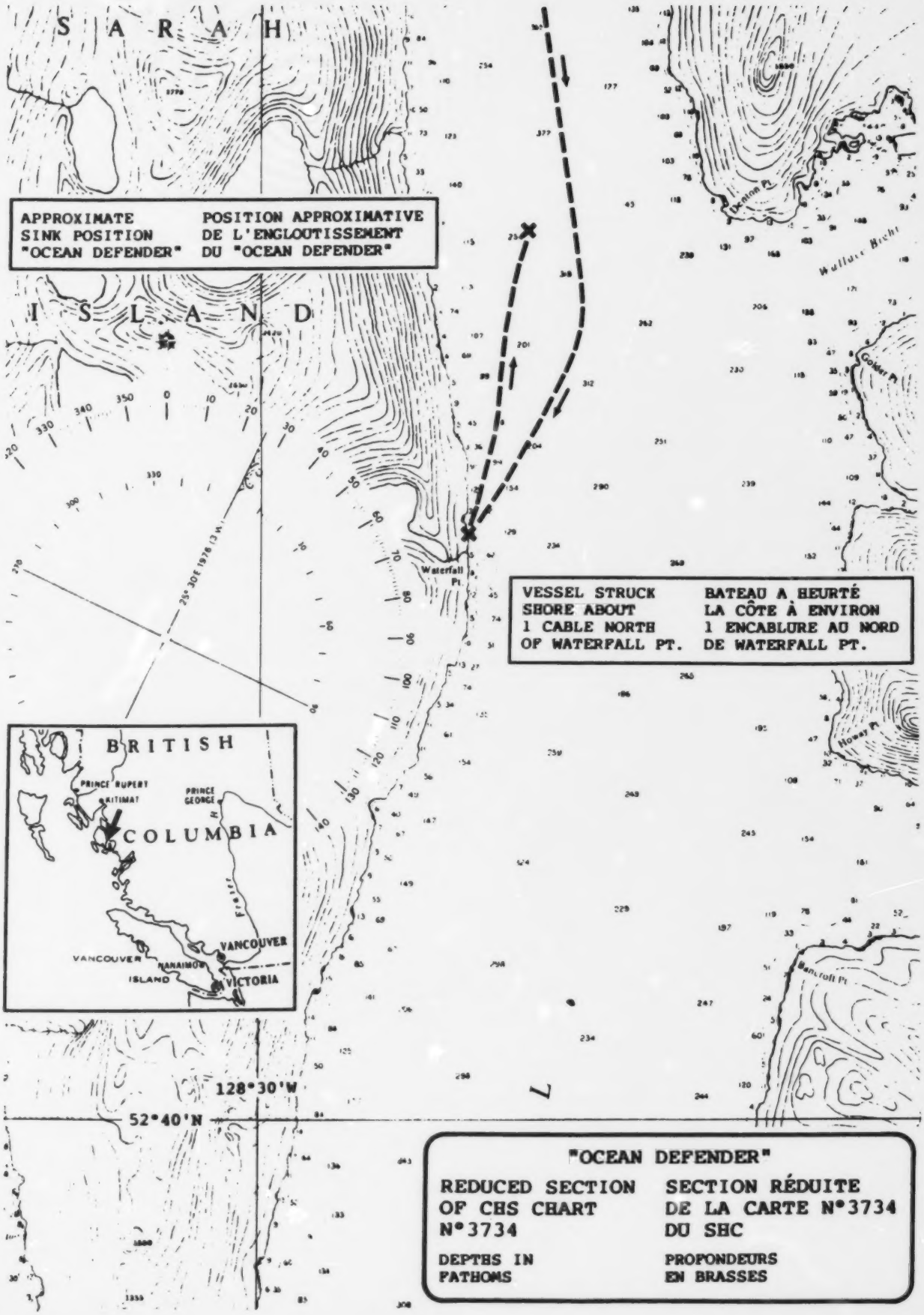
- the deck-hand had worked for approximately 19 hours without effective rest;
- the deck-hand was fatigued thereby failing to maintain a proper watch;
- although fatigued, the deck-hand did not call the skipper.

Other Findings

The Steamship Inspection Certificate of the "OCEAN DEFENDER" had expired on April 24, 1987 and the vessel had been operating since that date without a valid certificate.

The vessel sustained severe structural damage in the grounding and her automatic electric pumps could not cope with the ingress of water and the vessel's portable emergency pump would not start.

The operator of the "OCEAN DEFENDER" did not hold a Radiotelephone Operator's Restricted Certificate (Maritime), a prerequisite to operate a VHF R/T.


S A R A H
I S L A N D
APPROXIMATE SINK POSITION "OCEAN DEFENDER"
POSITION APPROXIMATIVE DE L'ENGLOUTISSEMENT DU "OCEAN DEFENDER"
VESSEL STRUCK SHORE ABOUT 1 CABLE NORTH OF WATERFALL PT.
BATEAU A HEURTÉ LA CÔTE À ENVIRON 1 ENCABLURE AU NORD DE WATERFALL PT.
Waterfall Pt.
Dixon Pt.
Wallace Bight
Howay Pt.
Bancroft Pt.
25° 30E 1978 (3 M)
BRITISH COLUMBIA
PRINCE RUPERT
KITIMAT
PRINCE GEORGE
Fraser
VANCOUVER
VANCOUVER ISLAND
NANAIMO
VICTORIA
128°30'W
52°40'N
"OCEAN DEFENDER"
REDUCED SECTION OF CHS CHART N°3734
SECTION RÉDUITE DE LA CARTE N°3734 DU SHC
DEPTHS IN FATHOMS
PROFONDEURS EN BRASSES

"OCEAN DEFENDER"

Glossary

CCG	Canadian Coast Guard
CCGC	Canadian Coast Guard Cutter
CCGS	Canadian Coast Guard Ship
CGRS	Coast Guard Radio Station
CMRA	Canadian Marine Rescue Auxiliary
ETA	Estimated time of arrival
Fish Packers	Fishing vessels being used only for transportation of fish
FPV	Fisheries Patrol Vessel
Free surface effect	Whenever there is a surface of liquid which is free to move, there is a loss of effective GM due to a virtual rise of the vessel's centre of gravity and the loss of stability caused by the movement of liquid in partially filled compartments when the vessel rolls. This movement may involve a large shift of weight.
Freeboard	The distance between the waterline and the upper edge of the weather deck.
FV	Fishing Vessel
GM	The distance between the transverse metacentre and the vertical centre of gravity, and is an indication of a vessel's ability to right herself when heeled over.
M	Magnetic
Mayday	Distress signal
MEDEVAC	The urgent evacuation of a person from a vessel for medical reasons
MRSC	Marine Rescue Sub-Centre

Port of refuge	A reasonably safe place of retreat from winds or storms
r.p.m.	Revolutions per minute
RCC	Rescue Co-ordination Centre
SAR	Search and Rescue
SFV	Small fishing vessel
SIC	Steamship Inspection Certificate
SSB	Single sideband radio
T	True
Trim	The difference between the draught forward and aft
VHF	Very high frequency radio